

36th Year.

La.

lk.

1.

ods

DA

duct

Y.

CHICAGO, ILL., APRIL 2, 1896.

No. 14.



Insuring Sections of Honey Shipping Safely.

BY B. TAYLOR.

The following paragraph was published on page 135, having been written to Dr. Miller:

having been written to Dr. Miller:

I wish we could get the collective wisdom of our sages on this matter. But, then, to the confusion of the tyro, their opinions differ so on this, as on most other matters. For instance, B. Taylor, in his Toronto essay, says he fills his sections with "moderately-heavy foundation," and boastfully remarks that he has sent 200-pound lots 700 miles with three railway transfers without a single section breaking down. Had the "moderately-heavy foundation" anything to do with insuring this safety? Also, had the viscidity of the honey (as a result of 60 days' storage in an iron-house with free air circulation) anything to do with it? Does he use spiral springs for his crates, or corrugated paper, perhaps? I wish he'd be less tantalizing, and a trifle more explicit. These big fellows just hint at things—in a rather supercilious sort of way—telling us youngsters just enough to make us long to know more. I wish you would "squeeze" B. T. a bit on this point.

S. D.

The loss from breakage in shipping comb honey is very great, and any light on the subject is important to the general bee-keeping fraternity. I will try to give my experience in preparing and shipping, in as plain terms as possible.

The first step is to have the combs built firmly to all four sides of the section, and to do this to a certainty, narrow sections—not more than seven to the foot—are best. I use eight to the foot. I have used thousands of sections two inches wide, but I never could get the bees to fasten the combs so firmly to the wood as in the narrower sections. In the wide sections there would be a small part of the comb that would be fastened to the wood in the center of the sides and top, and commonly not fastened at all to the bottom.

When I first used the 1½-inch sections, they would hold only about ½ pound of honey, and I invented the Handy slotted and cleated separators to remedy this defect. They not only did this, but much more, for ever since I began to use them the sections have been filled and capped solid, right plump to the edge of the sections, in a way that never has been, nor can be, done with a smooth, solid separator. With solid separators the bees will leave holes in the combs at the corners, so they can pass from comb to comb. If the combs were made solid on all sides there would be no passage from comb to comb, except by going over the tops or under the bottoms, and this they wisely refuse to do. But with the slotted separators there is a free passage from comb to comb right through the center of the super. The bees do not need to leave a passage in the combs; and the honey is built and capped solid to the sections on all sides. For making beautiful comb honey, that will ship safely, I claim the narrow sections, in connection with the Handy slotted and cleated separators, to be a great improvement over the old ways.

But to be sure of having every section complete, there must be two pieces of foundation in each section—a strip %-inch wide at the bottom, and the larger top piece to come % inch from this, and both pieces must be fastened exactly in the center of the sections, and so they will stick for all time to a certainty.

Let me say before leaving this subject, that the Handy separators are not used between each section, but only between each two combs. They will last a lifetime, and are cheaper than plain ones in the end, besides giving very much more fancy honey.

Now we have our honey as it will be when taken from the hives, and we must cure it. And here there are two points to be looked after. The first is to have the honey in the very highest excellence as to quality; and, second, to have it in the highest perfection for handling and shipping. Happily these two points both require the same treatment, viz.: To keep the honey in a very warm, dry, well-ventilated room for at least six weeks. This I do by putting the supers on end with an inch space between them, in my iron curing-house. I have the house of iron only because the warm sunshine will keep it at the right temperature very cheaply, and then mice, rats, and other pests are certain to not get in. But any room that can be kept near 100° will cure the honey equally well. One of the finest lots of honey I ever had was cured in a bed-room in a farm-house, directly over a large cook-stove that was fired up 20 hours each day.

Honey, after being treated in this fashion, has an excellence for the table that is unknown to those that eat it directly from the hives, or store it in an unventilated, cold room; and is so thick and strong as to ship with safety where honey can be shipped at all.

For shipping in 200-pound lots, I make a crate much in the style of those in use to ship one-piece sections. Those crates are four inches longer than the width of five of my 20-pound section-cases, and five inches deeper than two tiers of said cases. The large crate is made of light stuff, but is nailed very strong, and has a solid bottom of thin stuff. On this bottom I lay evenly two inches, when packed, of clean straw; then on this several thicknesses of waste paper. Five 20-pound crates are placed close together in the crate; this will leave them two inches from the end of the large crate, and this space is packed moderately solid with straw to make a cushion to receive and soften any end-jar in the cars.

On these first five crates is spread one inch of fine straw, paper laid on it, and five more crates put in as before, paper laid on top, and straw laid on as thick as is possible, so the cover can be nailed over all. I use pressure in nailing the cover on, as the fruit-men do in packing apples, for we must prevent all jumping of the honey in the large crate.

I must not forget to say that the large crate is just wide enough so the cases will fit snugly endwise, and no packing is used in this part. The glassed ends of the crates are all placed on one side, and the slats that make the large crate are far enough apart so the honey is plainly to be seen. The top strip that is used for the sides of the crate is long enough to project 8 inches at both ends, for the railroad men to lift it by.

The crate is now plainly marked with directions to set it lengthwise in the car, and is always sent by freight. This crate is too large for one man to handle, and it is all ready for two to carry conveniently without rolling. I have never lost a nickle from breakage in them. Forestville, Minn.

Spring Work in the Apiary.

BY WM. S. BARCLAY.

As the season is rapidly approaching when the bees will have to be examined, a few words in relation to the manner of handling them may not be out of place.

To those who have wintered their bees out-doors and at the same time used single hives, I will here say that they are more fortunate than myself if their bees bees are not troubled with dysentery. To avoid this great trouble I would advise that the single hives be enclosed in an outside case, and that they be packed now (as if for winter) on all sides except the front of the hive, and if the weather is warm enough for them to fly, that they be fed rye meal; if not warm enough, that the meal be liberally scattered over the tops of the combs. I remember one instance at least in which this treatment relieved me of some serious cases of loss from this my greatest spring trouble.

Those who have used double hives which have not been packed in their vacant spaces in the winter, should see that it is done at once. So far as my locality is concerned, I am not yet sure that it is not of greater consequence to pack at this time, than it is to do so in order to meet the rigors of a severe winter. In all outside packing I would advise that it should be put in quite loosely, as in this way we are more apt to avoid dampness, and this is our great object in packing.

As to feeding to increase brood-rearing, I have almost con-cluded that no matter how much honey may be in the hive, if we place feeding-honey, or sugar syrup in the proper position in the brood-nest it will be greedily taken by the bees, and thus be promotive of increased brood-rearing. By the proper position I mean by placing it out-side the division-board. I like this much better than feeding lightly every day above the brood-nest; it accomplishes the same purpose, and saves much time and labor.

Another matter that has been much practiced and written about is that of brood-spreading. This is a subject that should be approached with great caution—indeed, after practicing it to a limited extent for some years past, I have serious doubts that there is anything gained by the practice; and where it is attempted, I would insist that no spreading of brood should be attempted until the colony has at least four or five combs of sealed brood, and not even then, unless there is promise of continued favorable weather. If it is then attempted, it will be found that a little sugar syrup filled about one-third of the way down the combs, given for eggs. will cause them to be filled with brood much sooner than if given empty

The danger to be encountered in spreading the brood is to be attributed to the rapid and variable changes of the weather in which the bees, in closing the cluster, uncover their brood, and thus a portion of it is killed. I find after this has occurred the colony almost always becomes discouraged to such an extent that it is almost impossible to induce them to rear bees in time for the honey harvest, and thus the bees are reared only to become consumers instead of honey-gatherers, so that I much prefer to blanket down tight over the combs, not even using a "Hill's device," and then use plenty of packing over the brood-nest, leaving an empty space next the roof of the hive, and if feeding is done, let it be in the brood-nest outside of a division-board, as before spoke of.

In my locality, natural pollen will be very late this season, and as I find that the feeding of rye meal is a great assistance to brood-rearing, I would reccommend that this, or other pollen-giving material, be given freely to the bees.

Beaver Pa., March 17.

Mr. Aikin on the Swarming Question.

BY ADRIAN GETAZ.

In the Bee-Keepers' Review for December, Mr. R. C. Aikin, in an excellent contribution on the swarming question, says:

"In the American Bee Journal for Nov. 14, 1895, page 731, I "In the American Bee Journal for Nov. 14, 1895, page 731, I find the following sentence by Mr. Adrian Getaz: 'Excepting the case of loss of queen, queen-cells are constructed only when three conditions are present, viz.: 1st, a honey-flow; 2nd, a number of young bees, and 3rd, the laying of the queen restricted by either the lack of space (or rather empty combs) or a failure in the fecundity of the queen.' In the article from which I quote, he advances the theory that the bees under such conditions have a surplus of larval food which is used in the construction of queencells, hence swarming results."

The idea that the surplus of larval food is the cause of swarming is not original with me. It was discussed extensively in Gleanings during 1889, and advocated by quite a

number of our leading writers, chiefly Messrs. Stachelhausen and Hasty. Dr. Miller and Editor A. I. Root also endorsed it.

In some of the foot-notes Mr. Root insisted that previous to swarming, larval food is found in the embryo queen-cells, even quite awhile before any egg is deposited therein. He also stated that the idea of a surplus of larval food being the cause of swarming had first been advanced by Adair, several years before.

All seem to have taken the ground that the swarming All seem to have taken the ground that the swarming notion originates with the young bees on account of the surplus of larval food. This, I cannot see; it does not seem to me that the young bees, which have hardly ever been out should be the ones to get dissatisfied and want to swarm.

On the other hand, I can very well conceive that having more larval food than they can use in feeding the queen and young brood, they construct queen-cells, and, perhaps at first, only store the food in them until finally eggs are laid there also. Once the queen-cells constructed and getting pretty far advanced, the old queen begins to realize (probably as Mr. Hasty says, by the scent of the cells) that rivals are there, She gets excited and tries to destroy them, the bees instinctively try to protect them, and finally the excitement reaches the point where swarming takes place.

That the plurality of queens, or queen and queen-cells, is the immediate cause of swarming seems to be admitted without doubt, as least as far as I can see. If two or more queen are at liberty, a fight ensues, and only one remains. If one is free and the others in cells, and protected by the bees, or caged by the apiarist (this I know by experience), the free queen, after attempting to destroy her rivals, will swarm. Further on Mr. Aikin says:

But what causes this surplus of larval food? I can see "But what causes this surplus of larval food? I can see a reason in the activity and stimulus of the honey-flow, the greater number of nurse-bees, and the surplus augmented by a decreased amount of brood caused by crowding the queen; but if these are the causes of building cells, why do they not continue until the close of the flow? If the colony can be gotten safely past the first part of the flow (or through the first 10 or 15 days) without swarming, we may have present all the conditions named, and yet the swarming will decrease 25 to 75 per cent."

This may depend upon a great many circumstances, and I would like to know more about it.

In my locality honey comes in irregularly, and in moderate quantity at the best, from the first of April (fruit blossoms) to the middle of July, or a little later (sourwood). Until the first of June, or about then, should queen-cells be constructed, which is nearly always the case, swarming follows invariably. During that time the weather, at least during the night, is not very warm yet; and the bees remain crowded in the brood-nest, and in one, or perhaps two, supers immediately above. The result is that the queen gets easily crowded for space, and that when queen-cells are constructed, they are fully protected by the bees.

After that date, or about, the conditions change. I always put plenty of supers on my hives so that they will not be too warm. I find then (I mean after June 1) that the temperature is high enough to permit the bees to break up the cluster entirely, and work anywhere in the hives, and I find them scattered in all the supers instead of being concentrated in the brood-nest and immediately above. The higher temperature also favors the building of comb and storing in the supers. The result is that the brood-nest is no more crowded with honey and bees; and the queen has enough empty combs

If through failure of fecundity of the queen the construction of queen-cells takes place, the bees are not crowded enough to sufficiently protect them, and the queen succeeds (I say "succeeds" not "is permitted") in destroying them, or if the old queen is nearly worn out, and has not the energy to do it, the first virgin born will surely do it thoroughly.

Does the above apply to Mr. Aikin's locality? I don't know. I would like to know. In his case, judging by his writings, the question of temperature does not seem to play any part. Until some time in June, he has but little nectar, then all at once the flow comes in abundance, and with the I should sugflow excessive swarming during a week or two. gest the following explanation:

At the opening of a heavy flow the bees get somewhater cited, the same as they do when feeding begins, rush for the nectar, and crowd the brood-nest. It is also known that comb-building is not well started until after a few days. So they will at first literally clog the brood-nest, then after a few days. So they will at first literally clog the brood-nest, then after a few days the comb-building is well under way, the excitement diminished, the honey carried from the brood-nest into the supers, and the swarming decreases consequently.

That is only a supposition. I would like to hear more

08

ne 10

the first

and

Intil

CODring

cted,

re. 1 tem-

trated temin the owded combs struc-

owded

eeds (I

ergy to don't

by his

to play nectar, th the

ald sug-

hat el-

for the en that ys.

er a few itement nto the

ar more

about it from Mr. Aikin, especially what part the changes of temperature may play in the matter.

I will quote yet another paragraph:

"Mr. Getaz is evidently wrong in his theory that a surplus of larval food causes the building of queen-cells. Take from the most prosperous colony all its brood, and you at once take away its swarming; yet such proceeding ought to leave the colony with a superabundance of larval food and nowhere to use it."

I think Mr. Aikin is certainly wrong in this, or I do not

I think Mr. Aikin is certainly wrong in this, or I do not understand him. In a colony ready to swarm, we find quite an amount of sealed brood, only a limited amount of young brood to feed, and a still more limited amount of space to lay eggs in; nurse-bees also in quantity, and more of them are "borning" daily from the sealed brood.

We remove all the brood—what is the result? By the operation we at once give the queen plenty of room to lay, and in a day or two there will be plenty of larvæ to feed. At the same time the daily increase of nurse-bees from sealed brood is taken away, and with them the surplus of larval food. Does not that show that the withdrawal of brood has food. Does not that show that the withdrawal of brood has increased the amount of larval food needed, and decreased the source of supply, and therefore there is the construction of queen-ceils?

Knoxville, Tenn.



Some Subjects Reviewed and Commented Upon

BY DR. C. C. MILLER.

Unkind Flings.—"Now that we have for the first time a Southern journal, devoted to our favorite pursuit, ought we not, as Southern men, come gallantly to the support of the brave lady who has dared to undertake the enterprise of editing a Southern journal? It seems that her spirit of enterprise, or something she has said or done, has so provoked the spleen of a contributor to one of the above-named periodicals, that he was not long since moved to make the charge that this lady has been cribbing from the files of the American Bee Journal in order to make the columns of her journal more interesting. Later, he says in explanation, that she has been using in the Southland Queen, some articles that she wrote for the Bee Journal. Reading these unkind flings, I was moved to wonder if the writer had never felt, from mother, sister or wife, that love and devotion that, once experienced, renders the very name of woman sacred to a gentleman." ders the very name of woman sacred to a gentleman.

The above is said by " Novice" in the Southland Queen, and it seems a little strange that that paper should allow it to pass without comment. I suppose I am the contributor referred to, and I never made any "unkind flings" in the case, nor made any charge of cribbing. I said the articles were copied from the American Bee Journal, and in saying that I said just what the Southland Queen itself said. Knowing the facts in the case, the Southland Queen will please do the fair thing by making the proper correction. thing by making the proper correction.

THAT "FALLACY."—After reading what J. H. Martin has to say on page 179, I smole a quiet smile and said to myself, "Mr. Martin's reasoning machine is somewhat out of gear."
Just shake yourself awake, Mr. Martin, and see how it looks. You say less than one pound per capita is used, and because so little is used the bringing of a lot of California honey North doesn't make competition. Say, J. H., were you really awake when you said that? No, I don't believe I use the word "competition" "rather loosely" so long as a heavy shipment of honey from California brings down the price in the Chicago market.

AMALGAMATION .- On page 178, Manager Newman says the expressions so far given are mainly apainst amalgamation of the North American and the Union. I can hardly believe a square vote of the Union would show a majority against amalgamation. It certainly didn't look that way at Toronto, and at the last Chicago convention the vote of the Union members there was all in favorations. bers there was all in favor of amalgamation.

Now, friends, will those of you that are opposed to amalgamation please give us your reasons? I don't remember seeing any reasons given except those based on a misunderstand-

ing.

I was one of the first members of the Union, and have always been loyal to it. I want to see it continue and increase. As matters stand at present the prospect is that it will go out of existence. There's no use blinking the fact that it is now on the down-grade as to members. Give the members the additional advantage of the North American for the same manual and arther not more librar to stick by ? the same money, and are they not more likley to stick by?

Marengo, Ill.

See "Bee-Keeper's Guide" offer on page 221.

No. 1 .- Producing Comb Honey in Michigan.

BY W. Z. HUTCHINSON.

The first thing to be considered is the bees. As to variety of bees I know of nothing superior to a cross between the Italian and German. Italians are better foragers than the black or German bees. When the pasture is near, and the flow good, the blacks will gather as much honey as any bees; but when the nectar must be sought for far and wide, the Italians will be found the more industrious. If the Italians are better field-bees, they are excelled by the blacks as "house-keepers." They (the blacks) keep the brood-nest more compact, are better sough builders, earlier to the compact, are better compact, are They (the blacks) keep the brood-nest more compact, are better comb-builders, enter the supers more readily, and cap their combs whiter. The Italians are the bees to bring in the honey, the blacks the ones to handle it to the best advantage after it is in the hive. The Italians might be compared to the man who goes out in the field to labor—the blacks to the woman who stays in the house and manages to the best advantage the products of the man's labor. Of course, we cannot make any such arrangement with the black and Italian varieties of bees; at least, not any nermannt arrangement. varieties of bees; at least, not any permanent arrangement. By introducing a black queen to an Italian colony of bees there would probably be a short time when the majority of the field-workers would be Italians, and most of the nurses and wax-workers would be blacks, but such a division of labor would not last long-the Italians would soon be gone and the blacks in their place. Such a plan would not be practical, but a cross between the Italian and German is eminently so. A cross between these two varieties is not one whit behind the Italians as workers, and comes pretty well up to the blacks as "house-keepers." If such cross-bred bees are lacking in any respect it is in those characteristics possessed by the black

Possessed of the right kind of bees, the next step is to see that they are present in sufficient numbers at the time the surplus is to be gathered. Each bee-keeper must understand his locality and work accordingly. In those localities where the main harvest comes in the fall, but little attention is necessary to have the colonies strong in numbers by the time the harvest is ready; but when it begins in June, or the last of May, and lasts only six weeks, or less, where there is no basswood, it is of the utmost importance that the colonies be populous at the beginning of the season. Not only must they be populous, but the combs must be full of brood. As a rule, I don't believe it is profitable to change about combs in the brood-nest for the sake of getting them more completely filled with brood. By this I don't mean that more honey per colony might not thereby be secured, but it takes too much time. If the number of colonies is limited, and it is not practical to increase the number, and their owner has nothing else to do, such work might be advisable. When possible, it is better to have more colonies, up to the capacity of the field, and do less work per colony. In the early years of my bee-keeping I did a great deal of "fussing" with the bees. Latterly, in producing comb honey, the bees have almost managed themselves. They have been taken from the cellar, the sections put on and taken off at the proper times, the swarms hived, the harvest is ready; but when it begins in June, or the last put on and taken off at the proper times, the swarms hived, the bees put back into the cellar upon the approach of winter, and that has been about all there has been to it. I know I and that has been about all there has been to it. I know I have never produced honey so cheaply as by what some would call slipshod methods. With the sectional Heddon hive it is all right to transpose the two sections just before the opening of the honey harvest. This is a sort of wholesale, short-cut method of inducing the bees to more completely fill the combs with brood, that I endorse it. But don't do it too early. Better let the brood-nest remain entirely undestruced that the state. ter let the brood-nest remain entirely undisturbed than to chill some of the brood.

Perhaps all do not understand how transposing the sections of a Heddon hive will act as a greater inducement. Bees aim to keep their brood-nest in a globular shape. Cut this globe in two horizontally, and place the upper half below the lower one, and it will be seen that the two spherical sides are brought together in the center, while the broad, flat surfaces are brought to the top and bottom. In their endeavor to again bring the broad next to a globular shape, the bees fill cells with brood that would not have been filled had the broodnest been left undisturbed.

There is one more thing that can be done to induce a safe extension of the brood-nest early in the season, that is, surrounding the hives with some packing material. In ordinary seasons this may not be of much benefit, and I believe it is possible to so apply it that no good will result—possibly harm. The packing must not be too thick; if it is, it will deprive the bees of the benefit of the sun's rays Strong colonies may be able to take care of themselves under such circumstances, but it means death or disaster to a weak colony. The packing should be of such a thickness that the warmth from several

hours' sunshine will surely reach the bees. The packing will become warmed up during the day and retain it a good share of the coming night, besides preventing the too rapid escape of heat from the colony, thus acting as a sort of caloric balance-wheel. Two inches of dry sawdust is sufficient for spring-packing. There is one more point in connection with this packing that ought to be heeded, and that is the color of the packing boxes—they must be dark. Light colors reflect the rays of the sun, dark absorbs it. Venetian red is a good color.

I know that Mr. R. L. Taylor's experiments of last year showed no advantage in spring protection, but the spring was not one that favored protection—was a warm spring—and I fear that the packing was too thick. The benefits of protection show to the best advantage when a long spell of warm weather is followed by a "freeze-up" lasting several days. I one year lost nearly half of my bees by such a "freeze-up" about the middle of May, coming on the heels of about three weeks of fine weather. Colonies that were packed did not mind the cold. The raising of a cushion in a packed hive would show the bees crawling about all over the combs, while in a hive with no protection the bees were closely clustered, leaving large quantities of brood exposed. Weak colonies unpacked perished outright; medium-sized ones suffered the loss of much brood, while the extra-strong ones did not seem to suffer much loss, even if not packed.

I have no quarrel with those whose methods and localities are adapted to large hives, but to producing comb honey in my locality I prefer a small brood-nest. I want a hive of such a size that an ordinary queen with ordinary management can fill it with brood by the opening of white clover.

I would not unite weak colonies in the early spring. Without being able to explain just why, I know that several weak colonies united into one will, within a week after, dwindle down to the size of one of the weak ones at the time of uniting. As a rule, I would see that each colony had a good queen and plenty of stores, then tuck it up warmly and let it alone until the time approaches for putting on the supers. If at this time I found many colonies not strong enough to work for comb honey, I would-take the brood from one, two, or three of these weak colonies, as the case might be, and give it to one colony—just filling the hive with brood. A hive thus treated will soon be overflowing with bees. The colonies robbed of brood can be left to build up into sufficient strength for wintering, if nothing more.

I have devoted considerable space to the bees, but it must not be forgotten that in the production of comb honey no point is of more importance than that of having the hives overflowing with the right kind of bees at the beginning of the harvest. Having gotten the bees, I will, in my next, tell how to use them.

*

Ontario Foul Brood Inspector's Report.

BY WM. M'EVOY.

During 1895 I visited bee-yards in the counties of Lambton, Middlesex, Oxford, Brant, Elgin, Norfolk, Wentworth, Lincoln, Perth, Wellington, Peel, York, Ontario, Hastings and Simcoe. I examined 85 apiaries and found foul brood in 32 bee-yards, and other kinds of dead brood in many others. The great frosts in May, and the dry weather that set in right after, and continued for so long a time, was very hard on all apiaries on account of its shutting off the honey-flow when the colonies had large quantities of larvæ to feed. When the unscaled stores was used up the bees in many cases did not un-cap the old sealed honey fast enough to keep pace with the large amount of larvæ that required so much feeding, and the result was a good deal of starved brood, in several colonies, which was mistaken for foul brood in many cases. The great failure of the honey-flow would have led to the wholesale spread of foul brood through robbing setting in by the bees when the diseased colonies were being treated, if I had not taken particular pains to warn the bee-keepers well, and insisted upon everything being done exactly as I ordered. I went in for putting every diseased apiary in grand order, and for having as many, if not more, colonies at the close of the season as when I began. In every part of the province that I went into I found the bee-keepers were pleased when I called on them to examine their aplaries, with the exception of three men; one of these men had only four colonies, and they were bad with foul brood, and near other apiaries. I explained to him how to cure, and urged him to do so; I also warned him of the great danger of his keeping the disease so near other beeyards, but it was all no use-he refused to cure. I waited for over six weeks for that man to get his few colonies cured; he

did not even try to do anything, then there was nothing left for me to do but to go and burn his foul-broody colonies so as to save other bee-keepers from having their apiaries ruined by his diseased stock.

I burned one colony that was nearly dead with foul brood, for a bee-keeper that I never could get to cure his few colonies, or do his duty like other men. I burned three very badly diseased colonies in the same aplary the year before. When a bee-keeper can cure a few colonies of foul brood in a short time, and is urged to do so, time after time, and will not do it after being given every possible chance, then I have to stamp the disease out by fire for the public good.

I burned 13 colonies for another bee-keeper, that were nearly dead with foul brood, in fact, ome colonies in the same apiary had died right out with the plague. I did my best with that man several times to melt up his diseased combs, and burned three foul-broody colonies for him before, but all that had no effect on him, he would, and did, risk using old, diseased combs until his apiary got into a horrid state with foul brood. I then stamped the plague out again by fire, so as to save the valuable apiaries in the same locality.

I was very much pleased with the way all the other beekeepers went to work and cured their apiaries of foul brood, and some of these men had nearly 100 diseased colonies when they started to cure.

Five years ago last spring when I set out to get all the diseased apiaries in the Province cured of foul brood, I soon learned that I had undertaken a tremendous job. I found the bee-yards in every locality that I went into at that time in a horrible state with foul brood, and the disease spreading at an alarming rate then. And to make matters worse, many were selling when they saw it. I had first to take the greatest of pains to explain to every bee-keeper how to cure his colonies of foul brood, and then see that they made no mistakes, and that led to my having to write very many long letters to them, hours after I should have been in my bed, so as to help them out, by explaining everything again, which I always did.

I have handled the disease in six cities and 36 counties, and made a great success of ridding out the disease by getting thousands of colonies cured of foul brood and put in grand order. Several sales of diseased colonies had taken place by the very best of men amounting to hundreds of dollars. I soon found that neither the buyers nor sellers knew that the colonies had foul brood at the time of sale. I was chosen as the sole judge by all these parties. And in one case a note for \$240.00 had been given. I decided what I believed to be just and very fair to all, and I am very much pleased to say that I satisfied both the buyers and the sellers, and got everything settled very nicely.

thing settled very nicely.

Five years ago last summer, while on my rounds through the Province, I often met with opposition from the bee-keepers. Many of the small bee-keepers looked on the inspection business as a something gotten up to drive them out of bee-keeping, and several had no faith in a cure. Some expected that I was going to stamp the disease out by fire. I was astonished to find so many holding such views in so many parts of Ontario. I felt very sorry for those people, and took the greatest of pains explaining to them that I came to cure and not to destroy any colony if the bee-keepers would take hold and cure after I told them how to do it. Things have taken a great change since then. I don't find any more opposition, but all very willing to have me call and examine their apiarles.

My railway fares, time, and livery hire, for 1895, amounted to \$673.40. Woodburn, Ont.

[The foregoing report was read at the last meeting of the Ontario Bee-Keeper's Association, after which it was moved by Mr. Frith, and seconded by Mr. Chrysler, that the Foul Brood Inspector's Report be adopted. Carried.

It was also moved by Mr. R. H. Smith, and seconded by Mr. John Newton, that the Ontario Convention desires to express its appreciation of the work done by the Government in the curing of the various foul-broody apiaries throughout the Province, by the Foul Brood Inspector, William McEvoy, and gives their hearty indorsement of the methods of curing as adopted by him; also, to express themselves as believing Mr. McEvoy's methods for curing foul brood to be the best at present known. Carried.—Editor.]



The McEvoy Foul Brood Treatment is given in Dr. Howard's pamphlet on "Foul Brood; Its Natural History and Rational Treatment." It is the latest publication on the subject, and should be in the hands of every bee-keeper. Price, 25 cents; or clubbed with the Bee Journal for one year—both for \$1.10.



The Colorado State Bee-Keepers' Convention.

REPORTED BY F. L. THOMPSON.

(Continued from page 198.)

The subject of organization was then discussed.

Mr. Alford—We have about four times as many bee-keep-ers as we need. I have not sold any honey in Colorado for five The marketing of honey is what we should attend to.

H. Rauchfuss-We cannot afford to ship in small amounts. We must combine, and educate bee-keepers to produce marketable honey. That is what our organization is here for. But it does not fill the bill. How shall we do it? I don't know—but it must be done. If the organization is a success,

bee-keepers will join.

Mr. Devinny—Profit depends on putting the honey where it belongs. A man in Texas wrote me for two carloads. I thought surely I could get it for him, but couldn't find it in Colorado, because it had already been promised elsewhere.

Mr. Alford—There is no trouble in finding a market. We

have not too much honey, but we have bee-keepers enough.

Mr. W. L. Porter read an essay entitled "Our Associa-

tion," most of which is here given:

dy

OF

ry.

gh

ion

ted

rts the

and old n a

int-

i by

rood

the

the

and

g as Mr.

pres-

t is

tural

ation eper.

OUR ASSOCIATION.

Organization means civilization. I do not think we have any reason to be discouraged. Our society compares well with any similar society of the country. But we might have better attendance, and thereby achieve better results. To find the attendance, and thereby achieve better results. To find the combination is the problem. If we could combine, there is no doubt but what we could obtain better prices. The retail price of honey this winter is 15 cents, straight. Now the retail dealer is willing to pay \$3.00 per case of 24 sections, and still sell at that price. Allowing 25 cents for jobbing, this would make the price we should obtain \$2.75 per case. Instead of that, \$2.40 is about the average. This means 35 cents loss to each case.

This is a good illustration of what goes on every year.

Many of us do not dream of what might be done if we had a
Union, and could all sell honey through it. But we have to
face the thing as it really is. We, the honey-producers, are
not united. The only remedy is to work towards educating
the indifferent fellows to an appreciation of the benefit of
fallowskip. For our mostings to draw we should have they fellowship. For our meetings to draw, we should have them as social as possible.

I have thought it would be well to give one of our meetings—perhaps the evening session—to social culture and entertainment. We might have a program interspersed with music, essays, songs and speeches. This meeting might be made so very interesting that we would go away feeling that it sions apply receiving that we would go away feeling that

it alone amply repaid us for coming out.

The subject of the busy bee is attracting great attention in our public schools. Great stress is put on the teaching of the science and natural history of the bee to the children. Why not ask our professor at the Agricultural College to prepare a popular lecture on the science of the bee, with special drawings to illustrate, and then invite the teachers who are interested to be present, and allow them to ask questions, and give them the benefit of our many years of profound experi-

We could also save, if we had more funds. gest that we make the admission to the society \$1.00 for male,

and 50 cents for female, members.

Our meetings should be a means of education by which we may be kept abreast with the latest discoveries in our profession. It should be a financial aid. Through our society we should be able to learn the demand and supply of honey, so we can market to better advantage.

On the supply business I will not say much. But in my judgment it can be carried on better by local societies. There are several reasons for this. In a locality it is very often the case that some certain standard of goods has been introduced, such as the Langstroth hive or the Dovetailed, and that locality would have to buy of the house that produces that particular kind. Then it is better to have the goods shipped direct to that point in a car lot than to be shipped to another direct to that point in a car lot than to be shipped to another

point and then reshipped, which would take extra time and extra freight. Hence, wherever there is a locality with a number of bee-keepers, let them come together and organize and correspond with manufacturers and dealers for prices of such goods as they may need, and favorable results will come.

In the same way the honey can be disposed of. The people of each locality can get together and arrange to ship one or more cars of hone out. For instance, we may call Greeley one point; Fort Collins another, Longmont another, and so on.

These societies will have a tendency to educate the people in the benefits of association, and finally they will wish to take one step higher, and so we will have them up to the State

I have thought it might do good to make the place of our State meetings migratory. We could meet at Greeley, Fort Collins, Longmont, and once in awhile in the famous Arkansas In this way, as we push our ship around, a few barwantey. In this way, as we push our ship around, a few dar-nacles would catch on and perhaps would stick. In this way we would become better acquainted with each other and see more of our grand State, which is to be the banner honey State of the Union.

There might be an objection to this when we have an ax to grind in the Legislature, and would want to be on the ground to do it.

W. L. PORTER.

ORGANIZATION AND MARKETING.

The discussion on organization continued:

R. H. Rhodes—The Secretary has the names of 143 beckeepers, while the usual membership is 25 or 30. Keep the fee as it is (50 cents for male members, and 25 cents for female members). Increased membership brings increased

Mr. Devinny-Members here should write to those from a

Mr. Devinny—Memoers here should write to those from a distance to stay with them during the session.

L. Booth—There must be a State organization. Let our Secretary and other officers contract directly for supplies—let the local organizations get their supplies through our Secretary and Executive Committee.

Pres. Aikin-We might imitate the Citrus Fruit Exchange in California. There is a central office and a representative in California. There is a central office and a representative in communication with all growers. He is also in communication with the principal markets. Orders come to him, and he fills them from appropriate parts of the State. Supply and demand do not always regulate prices, on account of "cor-Therefore, let us not organize for greed-to raise the price especially, but to help those in debt to sell to the proper quarters at fixed prices. Small lots at low prices should not affect the market. We are to hold our produce for a short time. As soon as the small lots are cleared off, consumers must look to us for the rest of what they want. As a result of advertising, firms all over the country have written me for honey. I sold all my extracted at 7 cents. We haven't enough honey. If we had more, so that merchants would enough honey. If we had more, so that merchants would frequently call on us, the prices would be firmer. The package has something to do with it. Large packages are a detriment. The grocer gets disgusted after buying one can. He won't handle it in that shape. Extracted honey should be in small packages in large crates. In that way it may be made a staple article. I wrote to a commission firm about this. At first they discouraged the idea, but finally said, "Try it." If I can sell my honey that way, I can let it go for I to 3 cents a pound less as the work of transferring from large to small a pound less, as the work of transferring from large to small packages would be saved.

J. B. Adams—A Chicago firm wrote to me asking, "What can we buy Colorado honey for? It must be at such a price as to compete with California honey." But in their second letter they said, "We can sell all first-class Colorado honey "That for a good price in competition with California honey." That shows why the honey we ship should be first-class. We can't produce enough to supply all the first-class honey wanted. Since then I have received requests for 3½ carloads. They all want it first-class.

Mr. Alford—On commission? Mr. Adams—No, sir.

Mr. Alford-Sell none on commission. Sell it f. o. b. here. My experience with selling on commission has been such that I want no more of it.

Mrs. Shute—It is possible that Chicago man Mr. Adams referred to saw the Colorado honey at the World's Fair. A Chicago newspaper said: "The public conceded the awards

to the Colorado honey."

J. E. Lyon—Even if only two or four get together, it pays to organize. Then we can first send a man ahead to sell, and afterwards send the honey, at a cost of not more than a cent a pound. I have shipped honey to Illinois in 500-pound lots. It is always wanted. It is never necessary to undersell.

Pres. Aikin-I have shipped to many States. They all said mine was fine honey.

F. Rauchfuss-There used to be an organization here for that purpose. Each member was a stockholder. That is the only way to have it.

L. Booth-That failed from bad management.

the trouble with stockholding.

Pres. Aikin—The Citrus Fruit Exchange have succeeded. They have controlled half the output of Southern California. They have a central office controlled by managers elected by stockholders. Their orders come in, and their markets are worked up, before the season opens. A car goes to all markets. It does not have to be reshipped. The rebate in freight rates goes to the producer instead of the commission-men.

Mr. Devinny—One method would be to make a contract or agreement to furnish so much honey to be shipped. If you sign an agreement to furnish goods, it is just like a note.

F. Rauchfuss-We should reach those who do not find it convenient to attend, but who would receive benefit by being members.

SECURING SURPLUS IN ADVERSE SEASONS

was next treated of in an essay by V. Devinny. From forgetfulness, Mr. Devinny's essay was not procured, but in substance it was as follows:

I shall only treat one aspect of this question. Honey-production requires the production of young bees early in the season. When animals are in unnatural conditions we should help them. Our bees are not native to Colorado. Since there are many warm days in which bees fly before natural pollen comes, flour should be fed. I have practiced feeding wheat flour for many years, and have found nothing better. Last year I fed 150 pounds to about 100 colonies. I press the flour firmly down in the bottom of the vessel, and set it at an angle of 45° . In this way the bees do not get in and smother. V. DEVINNY.

Mr. Adams-I recommend mixing the flour with an equal

quantity of clean chaff. It gives them plenty of room.

Mr. Devinny—I have tried mixing the flour with coarse materials, but do not like it. The bees split their wings. By my method they do not get in at all.

Mrs. Booth—I spread the flour along a table 15 or 20 feet in length. The bees do not smother.

R. Patterson—How long before the honey-flow should flour Do you look at light colonies at the same time?

be fed? Do you look at light colonies at the same time? They will be incited to use up their honey.

Mr. Devinny—I do not feed before March 1.

Mr. Adams—I commence to feed as soon as they will take.

Mrs. Booth—Be careful about feeding too soon. Once about April 1 my hives were overflowing with bees, and I lost 12 or 15 colonies by starvation. It rained several days, and they could not fly for fruit-bloom.

Mr. Adams—I gave my reply on the supposition the bees

Mr. Adams-I gave my reply on the supposition the bees

had enough stores.

Mr. Alford—I would like to be troubled with too many

bees. I don't care how early they get strong enough.

Mr. Tracy—Watch for lightness of stores by lifting hives.

Always keep full combs on hand to replenish.

Mr. Alford—I feed 4 or 5 bushels of oats. I never touch the hives before April 1, then put in full combs when neces-There is more danger of starving about June 10 than any other time. But the colonies are so strong then it is hard to get honey in. So I feed inferior honey outside on boards to tide them over.

Pres. Aikin-I feed flour as soon as they will take it, to keep them from bothering my neighbors, and from going to the flour-mills and getting lost, and I would feed anyhow. In feeding liquid honey outside, look out. I will give an instance: Last spring I took about 600 pounds of feed honey, which was fully half water, to an out-apiary of 80 colonies. Arriving at 4 p.m., I poured it over a large quantity of extracting-combs outside, and at once passed along the hives, flinging a few drops of honey on each alighting-board, and tapping or kicking the hives to bring the bees out, and to put each colony on its guard. For a few minutes they did not know where to look for the source of the supply, kept nosing around each others' hives, and, oh my, how cross they were! But when they began to carry the feed in, I could open hives just as in a honey-flow. The honey was all gone at half-past five.

Mr. Alford-Did you visit that apiary next day?

Pres. Aikin-No, but I have done so on similar occasions. There was no robbing. It is just as when a honey-flow stops.

Each colony is on its guard. H. Rauchfuss—Don't buy sugar for that purpose when you can get extracted honey for 5 or 6 cents a pound. It would be profitable to know which goes farther.

F. Rauchfuss-To use honey instead of sugar will assist other bee-keepers.

Pres. Aikin-Outside feeding should be done in the after. noon, as late as possible, so that the honey will all be in the hives before the neighbors' bees know where it is.

Mrs. Booth-I have had no trouble with robbing by this method.

Mr. Carlzen—How close to the hives do you feed?

Pres. Aikin—Anywhere; 10 to 50 feet.

Mr. Adams—How often?

Pres. Aikin—As often as necessary.

Mr. Patterson-But what need is there of such broadcast feeding? Why not feed the weak colonies only, and feed them inside? I have a lot of swarms which were without honey in the fall, and I am trying to feed them now.

Mr. Porter—I don't think it advisable to feed at this sea.

son of the year. But in June the colonies are all alike and

all out.

H. Rauchfuss-Don't fuss with weak colonies by feeding. If you have not enough bees, you can buy up heavy colonies in the vicinity for \$2.00 apiece, and unite your weak colonies with them, if you do not want to kill them.

Mr. Alford—I didn't succeed in keeping the ground clear longer than a year in my neighborhood, by buying up.

Pres. Aikin—In outside feeding, those frames found filled

with honey can afterwards be put where they are wanted.

Mr. Adams—How should the feed be diluted?
Mr. Porter—Half and half. Outside feeding is all right. Pres. Aikin-If it is too thick they will daub each other.

(Concluded next week.)



CONDUCTED BY

DR. C. C. MILLER, MARENGO, ILL.

[Questions may be mailed to the Bee Journal, or to Dr. Miller direct.]

Spraying Fruit-Blossoms.

Is there any danger to bees or honey from spraying fruittrees in bloom with poisonous solutions? G. S. C.

Answer.—Yes, most decidedly. The man who sprays fruit-trees in bloom doesn't know his business. It can do no good whatever to the blossoms, and may do harm. In some places the law will not allow spraying fruit-blossoms.

Bees Need a Cleansing Flight.

I noticed one of the hives in the cellar this morning had the bottom-board and part of the front well smeared with something like propolis. I suppose the colony has bee-diarrhea. What would you do? I do not want to put them out for at least two weeks yet. There seems to be plenty of bees in the hive, and they are quiet. in the hive, and they are quiet. READER.

Answer.-Air the cellar thoroughly, and if you can do so, warm it up at the same time. But nothing will answer so well as to have warm weather come so the bees can fly.

Dividing Colonies for Increase.

As I will not be at home this summer to attend to my bees, I wish you would advise me as to the best way to divide them, as I wish the increase and do not want them to swarm. SUBSCRIBER. Olympia, Wash.

Answer.—It isn't the easiest thing to know what is the best way to divide without knowing all about the circumstances. Even in the same apiary one colony might be so different in its conditions from another that a different plan should be used. In your case, if I understand rightly, the idea is to prevent the bees swarming, and at the same time have the increase, only being in the apiary on stated occasions. So I'll try to give you one way of data. to give you one way of doing—a very easy way:

As soon as the bees get fairly to work and begin to increase in numbers, give each colony a second story, putting the hive with empty combs or foundation under the full one. Very likely the bees will work down into this lower story more or less, and at any rate the extra room will have a tendency to prevent swarming.

About the time of the beginning of the main harvest, lift off the upper story and put it on a new stand, leaving the queen on the old stand in the partially empty hive. This makes your work very little, and if you do nothing more each hive put on a new stand will rear its own queen, but it will be a great help if you can give to each a cell ready to hatch.

The Queen-Clipping Device.

Who and where is Mr. Monette? I am anxious to learn a about his queen-clipping machine. J. W. P. more about his queen-clipping machine.

ANSWER .- Mr. Monette is at Chatfield, Minn., and is a well-informed practical bee-keeper. I have never seen his device, but from the explanation given in a late number of this journal, I should think it might be a good thing.

Lucern or Alfalfa-Sweet Clover.

Can you inform me about a grass called lucern? In American Bee Journal of 1894, page 434, in "Bee-Notes by the Wayside," Mr. E. S. Lovesy speaks of lucern. Where can the seed be bought? Is it sweet clover? Will it grow in this State? How many kinds of sweet clover are there, and which is the best for bees?

J. R. F.

Rochester, N. Y.

1.7

it-

ith arees

so, rell

311-

he ore-

Answer.-Lucern is the same as alfalfa. I only know of the white and yellow sweet clover, and I believe the white is best, but I never saw much yellow.

Size of the Hive.

Which is the better size for a bee-hive, 13%x20x10, or 13%x20x12 inches, outside? It seems to me 10 inches in depth is rather shallow. F. M. C.

Answer.-Most bee-keepers prefer a frame not so deep as would be taken in a hive 12 inches deep. The additional two inches makes quite a difference about taking out and putting The additional two in the frames. Some would prefer the deeper hive on account of the increased capacity, but others would say it is better to have two stories of the shallower frames. Opinions vary widely, and its one of those questions you'll have to settle for your-Just now, for myself, I'm inclined to try two stories with standard sized frames.

Turning Honey into Wax by Feeding.

I have had a dim idea or plan in mind for some months, I have had a dim idea or plan in mind for some monning, and would like to know what you think of it. I do not think that I can depend entirely for suport upon the bees, as the honey-flow is not very heavy. There is no clover, and almost no basswood bloom here, but plenty of locust, some golden-rod and wild flowers. The yield from locust is very uncertain, and cannot be depended upon. I am afraid that what little I could do in the way of artificial reasturage, would not be much could do in the way of artificial pasturage would not be much

I like to manage an apiary first rate, but I am afraid I must have some other business than bee-keeping if I stay here. My idea is to give the bees as much freedom as possible in their house-keeping arrangements, examining them once or twice in the spring and summer, and seeing that they are in good conditton for winter. Having clipped queens, some one at home can easily manage swarming with the bees in 10-frame Langstroth hives tiered up so as to furnish plenty of

As I cannot attend to them closely during the proper time, comb-honey is out of the question. I might do as the Dadant's do, and, during my slack times in business, after the season is over, extract all surplus. But there is a serious objection to extracted honey with me—it is from badly mixed sources, and is what I call strong or rank honey, and does not have ready sale. Therefore I should like to turn those surplus frames of honey into way.

In the late fall I can easily get away from business for two or three weeks. At that time I should like to feed back the

surplus honey for the wax it will bring. The combs that contain the surplus and those obtained by feeding back should make quite a quantity of wax from 25 colonies of bees. I will give a few points, as I think of them, in favor of the plan:

1. The combs being new, they would be easily worked

into wax by any method.

2. It would be A No. 1. in quality, and would bring the

highest price.
3. The market price of wax in New York is as high, or higher, than in other cities, I think.
4. The great demand for it would insure a good market.
5. There would be no trouble from granulation in feeding back for wax, as the result is neither comb nor extracted honey, nor winter stores.
6. The feeding back would fill the hives with young bees,

which I think is a good point.

As comb and extracted honey seem to be out of the question with me, I should like your advice as to whether you think it would add something to my income to follow this plan. I do not expect great returns, but if it would bring me in a small sum every year—that with the pleasure of handling the bees, would satisfy me. In what way would you feed back the honey? Would you uncap it and place it at a short distance from the aplary, or would you feed it in the hive? If so, how?

Stamford, Conn.

Answer.-If you have 1,000 pounds of extracted honey of so poor quality that you can get only 5 or 6 cents a pound for it, and feed it all back to the bees. I've no kind of an idea that all the wax you could get from it would begin to bring you as much money as the honey before feeding. You can't get all the honey turned into wax, only enough to contain the honey. Don't try it on a large scale.

Bees That Store No Honey.

I have had a colony of bees in a Langstroth hive for about 10 years, and it never swarmed and never gathered any honey, but seemed to be very strong through the honey season. I never look in the hive, as it is so much trouble, you tell me what is wrong?

Springfield, Tenn.

Answer.-Hard to tell. The bees may be very poor stock, and a change of queen might help. There may be a great deal too much drone-comb, and cutting this out and giving workerfoundation would be a good thing.

Queen-Excluding Honey-Boards and Extracting.

Does it pay to buy queen-excluding honey-boards when producing extracted honey? If they are not used will the queen enter the supers so as to discommode the apiarist? B. D. D.

Answer.—A large number think it pays well. There is a growing tendency to avoid extracting from combs that have brood in them. Still, there may be no great need of excluders if the brood-nest is very large and the extracting-combs are spaced wide apart. Dadant says queens are not so likely to go up if extracting combs are shallow.

Is Foxglove Honey Poisonous?

- 1. Is honey gathered from digitalis or foxglove poison-
- ous?
 2. "Would you advise starting an apiary in a neighborhood where it grows.

Answers .- 1. I don't know. I don't believe it is. fess to just a little skepticism about there being much, if any,

honey that is poisonous.

2. I might possibly make a mistake in the matter, but I should't pay any attention to foxglove. Even if the honey is objectionable, is there enough of it to make any difference? Perhaps it might be well to say that there is such a thing as honey being in effect poisonous to the bees, even when all right for people to eat. In some places bees get honey that seems all well enough, only the bees can't winter on it, so it might as well be poison for them.

Every Present Subscriber of the Bee Journal should be an agent for it, and get all others possible to subscribe for it.



GEORGE W. YORK & COMPANY,

118 Michigan St.,

CHICAGO, ILL.

REGULAR CONTRIBUTORS :

G. M. Doolittle, of New York.
Dr. C. C. Miller, of Illinois.
J. H. Martin, of California.
Chas. Dadant & Son, of Illinois.
B. Taylor, of Minnesota.

\$1.00 a Year-Sample Copy Sent Free.

[Entered at the Post-Office at Chicago as Second-Class Mail-Matter.]

Vol. XXXVI. CHICAGO, ILL., APR. 2, 1896.



Bees and Honey in Illinois.—The Statisical Report issued by the Illinois State Board of Agriculture at the close of 1895, gives the following for the apiarian industry

Of the 427,667 pounds of honey produced in Illinois last year, 151,823 pounds was produced in the northern division of the State, 105,925 pounds in the central, and 169,919 pounds in the southern division. The average price received

was 13 cents per pound, and the total value, \$56,534.

There were 50,760 colonies of bees reported in Illinois in 1895.

Well, that is a beginning. May be this year beeswax can be included in the Report. We wish they would separate the honey into extracted and comb.

The Next North American Meeting.-We have received the following about the 1896 meeting of the North American Bee-Keepers' Association, from ex-President Emerson T. Abbott, of St. Joseph, Mo .:

I see that the Nebraska people have begun to make arrangements for the next meeting to be held at Lincoln, and I do hope there will be no thought of holding the meeting at any other point. It seems to me that every member, who was at St. Joseph, especially owes it to our Nebraska friends to do all he or she can to aid in fulfilling the implied promise which was made that the next meeting should go to Lincoln. Let us go there next fall, and carry out our part of the contract, and then I for one will vote to have the next meeting at any time or place that seems to offer the best inducements.

I am inclined to think that the bee-keepers of the country will be a unit as to Lincoln when they fully understand the conditions under which the Nebraska people voted to send the last meeting to Canada.

EMERSON T. ABBOTT.

We should like to hear from those good Nebraska people that were at the St. Joseph meeting. How do Messrs. Stilson, Whitcomb, and others, feel about meeting at the same time and place as the Grand Army this year?

Corrections. -On page 182, second column, and second line of Mr. Aikin's first remark, the number should be 10 instead of 100. On the same page and column, in the first line of the second paragraph of H. Rauchfuss' second remark, the word "not" was omitted. It should read, "queens will not seldom lay 5 or 6 eggs," etc.

California Bee-Keepers' Exchange.-The By-Laws of the California Bee-Keepers' Exchange, contained in a neat little pamphlet of 23 pages, form a very interesting document. To give any definite idea of what is contained in those 23 pages would take too much space, but a few points may be mentioned:

Membership is confined to actual producers of honey, and admission to membership is carefully guarded. Each member pays an admission fee of \$1.00, and then 75 cents dues four times a year. Each member is required to turn into the Exchange his annual product of honey, but he can sell direct to the consumer in the home market. The Exchange retains 5 per cent. of the proceeds of extracted honey, and 21/2 per cent. of comb. The amount thus retained, after paying current expenses forms a guarantee fund. The guarantee fund may be loaned to the permanent fund, and then there's an arrange. ment by which the members may get back part of the funds of the Exchange if it gets too flush. Debt may be incurred to the amount of \$50,000. The Exchange will receive honey from those not members, charging, besides the expenses of marketing, a commission of 5 per cent. for extracted honey, and 21/2 per cent. for comb.

The Exchange seems to mean business, and its career will be watched with very great interest.

The American Bee-Keeper for March, contains a real funny editorial, in which it condemns very strongly what it is pleased to call, "so many 'soft' sayings, selfpraise, mutual editorial flattery, and railings over personal domestic misfortunes as are found in the bee-journals of the country."

As an actual fact, in that self-same March American Bee-Keeper, we find items and articles with these suggestive head-

"Kissing;" "An Attentive Gallant;" "An Old Love-ter;" "And then He Proposed;" "The Fin de Siecle Letter;" "A Damsel," etc.

Talk about "soft sayings"-why, the above seem pretty mushy! "People in glass houses," etc.

Apis Dorsata Once More. - The Ontario County, N. Y., Bee-Keepers' Association seems to be determined that the "Giant Bee of India" shall be brought to this country, whether or no. We have received the following from the President of that Association:

CHAPINVILLE, N. Y., March 16, 1896.

Mr. Editor:—We enclose an open letter to the bee-keepers of the United States, that we would like to have published in the American Bee Journal. We also enclose a copy of the We had hoped that others more capable would lead in the matter, but becoming disgusted with the delay of those who are supposed to look after the apicultural progress of the country, we decided to move in the matter if we moved lone. We are acting entirely on our own responsibility, with 'malice toward none, and charity for all."

Yours fraternally, EXEC. COM. ONT. Co., N. Y., B.-K. A. W. F. MARKS, Chairman.

The "letter" referred to by Mr. Marks, reads as follows:

OPEN LETTER TO THE BEE-KEEPERS OF THE UNITED STATES.

Fellow Bee-Keepers :- We have prepared for circulation a petition asking the Secretary of Agriculture of the United States to take steps to secure and introduce "Apis dorsals"—the Giant Bee of India—into this country. It is a duty that the Government owes, and is willing to render our industry. (See Report of Secretary of Agriculture, 1893, page 25.) Owing to the rapid disappearance of the bumble-bee the introduction of these bees will soon be a necessity in the successful growing of red clover for seed, if for no other purpose. That these are a distinct and large race of bees there is no That these are a distinct and large race of bees there is no doubt, but of their practical value we know nothing, and never will know until we have thoroughly tested them. As progres sive bee-keepers and honey-producers, we should not rest until

every spot on this earth has been searched, and every race of honey-bees has been tested. We should do it for the advancement of scientific and progressive apiculture, for ourselves and for posterity. Prof. Cook said in the American Bee Journal, Oct. 25, 1890, page 708:

"It is not creditable to the enterprise of our time that the Orient is not made to 'show its hand,' and any superior bees that may be in existence in Africa, India, Ceylon, or the Philippine Islands, brought here for our use and test."

Our Association has taken hold of this with sincerity, and expects the united support of the bee-keepers of this country, and with their support the end of the nineteenth century will witness a new era in apiculture, in which the bee-keepers of the United States will take a leading part. Life is too short for further delay. There is much to gain and nothing to lose. We are determined to succeed, and want your active assis-Yours fraternally,

EXECUTIVE COMMITTEE, Ontario Co., N. Y., Bee-Keepers' Association.

Copies of these petitions may be obtained by any one who will circulate them, by addressing, W. F. MARKS, Chapinville, N. Y.

The following is a copy of the Petition which the Ontario Co., N. Y., Bee-Keepers' Association is desirous to have circulated for signatures:

To the Honorable, the Secretary of Agriculture, Washington, D. C .:

The bee-keepers of this country are aware of the existence in the East Indies of a large honey-bee, known as "Apis dorsata," reliably reported to be an excellent wax-maker and honey-gatherer. It is believed that these bees would be of great advantage to the apiarian and agricultural interests of the country—a belief which only actual trial will ever confirm. The bee-keepers are thankful, and appreciate all favors received from the Government, yet they have asked for, and have received, perhaps, less than any other branch of Agriculture of equal importance. Realizing that, if we are going to have "Apis dorsata" domesticated during "our day and generation," it is time to begin, and since repeated individual efforts have failed to import these bees alive, we, the undersigned bee-keepers and farmers, respectfully and earnestly petition you to take steps to insure their introduction into the United States. In this we represent the sentiment of a majority of the progressive bee-keepers of the country. The Secretary of Agriculture, in his report for 1893, page 25, says: "The Entomologist, Prof. Riley, strongly recommends, as a part of the work for this fiscal year, an attempt to intro-duce from Ceylon the Giant Bee of India; therefore, the interested attention of bee-keepers in the several States is directed in a special manner to these suggestions.'

We, therefore, pray that our petition will receive immediate and favorable consideration.

In order to get an expression from some more of the "progressive bee-keepers of the country" on this subject, we hereby request that all who reply to questions found in the Question-Box" department of the American Bee Journal, please send us on a postal card their opinion regarding the matter of importing "Apis dorsata," as proposed by this Petition. If they will do it at once, we can publish the replies this month yet. Such expression will no doubt be an aid to others in deciding whether or not they wish to help in the undertaking. It seems to us that if, as proposed, "Apis dorsata" will prove such a great acquisition, a petition issued by the North American Bee-Keepers' Association would carry with it greater weight when it comes before the Washington authorities.

Kindly let us have a prompt response from those who represent our "Question-Box."

The Rural Kansan has been purchased by the Progressive Bee-Keeper, and its subscribers will hereafter receive the latter paper. So writes Editor Leahy, of the Progressive. It's a good move. In the first place, the "Kansas Bee Journal" was started; then the name was changed to "Rural Kansan," and now it drops out altogether. 'Tis just as we expected. There is no need of more new bee-papers or other farm papers. There are more papers published now

than are well supported, and for any one to rush into the newspaper business these days shows a lack of good sense. Of course, the older papers can stand it all right, no matter if a thousand new ones are started, but what folly it is for any one to throw away good money on such useless and needless ventures. "A word to the wise," etc.

Grading Comb Honey.—This subject is brought up again in Gleanings for March 15, after a hibernation of several years. Mr. Thos. Elliott, of Harvard, Ill,, who mentions it, thinks that Dr. Miller's grading, offered in 1892, would suit the majority, and says that what is wanted now is "action," as "the matter was discussed all that was necessary." Mr. Elliott says further :

My plan now is to print small, cheap slips, reading something like this:

thing like this:

The honey in this crate is graded according to the rules laid down by the Miller grade, which is as follows:

FANCY.—Combs straight, white, well filled, firmly fastened to wood on all four sides; all cells sealed; no polien, propolis, nor travel-stain.

No. 1.—Wood well scraped, or entirely free from propolis; one side of the section sealed with white cappings, free from pollen, and having all cells sealed except the line of cells next the wood; the other side white, or but slightly discolored, with not more than two cells of pollen, and not more than ten cells unsealed beside the line of cells touching the wood; comb fastened to the wood on four sides.

No. 2.—Three-fourths of the total surface must be filled and sealed; wood well scraped of propolis.

No. 3.—Must weigh at least half as much as a full-weight section.

For the Classes of honey I would suggest the four already in use, sufficiently understood from the names alone; namely, LIGHT, AMBER, DARK, MIXED.

Parties buying or selling honey will please quote this grade.

The grade marked on the crate would designate the con-Larger copies could be printed for the use of commission men and dealers. A slip could be put into every crate sold, and placed where they would do the most good. Having once gained a foothold, it would surely spread.

Thos. Elliott.

In a footnote to the foregoing, Editor Root said :

This was a compromise of the grading suggested by J. A. Green and W. C. Frazier—the grading proposed at Albany, and the one at Chicago, combining, as I understand it, according to the best judgment of the Doctor, the best points Some of the former gradings were too exact, and too difficult to comply with. Others were too wordy. If I remember correctly, no other grade since that time was suggested, and I am going to assume, at least, that our readers at the time had no particular objection to it.

I was sorry that the subject of grading was dropped some years ago, without coming to any decision. I have always felt that a poor grading was better than none at all, providing that all could adopt the same system in referring to their qual-Now, lest we get into the same snarl we did ities of honey. before, in criticising and suggesting until no grading was left, I would suggest that, if this Miller is not so "awfully" bad, we adopt it.

I am of the opinion the bee-journals can do as much as or more, in this line than any association or convention of bee-keepers. If they (the journals) were to agree on some system of grading, and then request all their commission men to quote prices on honey according to that grading, it would not take very long before it would be universally applied. Gleanings stands ready to co-operate with any of its cotempo-

We think the great difficulty will be to get the commission men to co-operate with the bee-papers in this matter, still a trial could do no harm, and might lead to much good. The American Bee Journal also "stands ready" to join hand with the other bee-periodicals in an attempt to establish a system of grading. Surely, there is need enough for it. Shall we all try to have the "Miller grading" used?

Honey as Food and Medicine.—A new and revised edition of this 32-page pamphlet is now issued. It has 5 blank pages on which to write or paste recipes taken from other sources. It is just what its name indicates, and should be liberally distributed among the people everywhere to create a demand for honey. It contains a number of recipes on the use of honey as food and as medicine, besides much other interesting and valuable information. Prices, postpaid, are: Single copy, 5 cts.; 10 copies 30 cts.; 50 for \$1.00; 100 for \$1.75. Better give them a trial. Send all orders to the Bee Journal office. all orders to the Bee Journal office.



Largest Factory in West Good Supplies and Low Prices

READ THIS—Mr. Keyes says: The 100 rounds of Extra-Tain Foundation you sent us? is superior to anything he ever saw; and I think the same. R. L. TUCKER, Wewahitchka, Fla. Dear Sirs:—The Sections came duly to hand. Indeed, they are very nice. Yes, sir; they are as good as the best.

Leahy Mig. Co.:—I have received the bill of goods. I must say they are the choicest lot of Hive-Stuff I have ever received from any place. I admire the smoothness of your work, and your close selection of lumber. Yours very truly. O. K. OLMSTEAD, Orleans, Nebr.

Dear Sirs:—The Sections arrived in due time, and are all O. K. so far as examined. They are simply perfection. I can't see how you can furnish such goods at such low prices. I hope you may live long and do well. Yours respectfully. Z. S. WEAVER. Courtney, Tex. Gents:—I received the "Higginsville Smoker" all O. K. Lis a dandy; please find enclosed stamps for another. Yours truly. Otto Enders, Oswegathe, N. Y. Gentlemen:—I have bought Supplies from nearly all the large manufacturers by the carload, and I must say yours are as good as the best. Indeed. In many lines they are the best. It is a pleasure to handle them.

The above unsolicited testimonials are a fair sample of hundreds we receive.

Our prices are reasonable and the "Higginsville Goods" are the best.

The "Higginsville" Goods are for sale by the following parties:

Chas. H. Thies, Steelville, Ill.

Henry L. Miller. Topeka. Kans.

J. W. Rouse & Co., Mexico, Mo.

And by a number of others.

If you need a Carload of Supplies, or only a Bee-Smoker, write to us. Remember, we are here to serve you, and will, if you give us a chance. A Beautiful Catalogue Free.

LEAHY MANUFACTURING CO., HIGGINSVILLE, MO. 49A Mention the American Bee Journal.

CHEAPER THAN EVER

Hilton's haff

Sections

T Supers Foundation Smokers

And everything needed in the apiary.

1896 Catalog of 36 pages free.

GEO. E. HILTON,

FREMONT, MICH. Mention the American Bee Journal

Dadant's Foundation in Chicago!

No other Goods kept here. Send for Price-List,

CHAS. DADANT & SON, 118 Michigan St., - CHICAGO, ILL. Please mention the Bee Journal.



ONE MAN WITH THE

ONE MAN WITH THE UNION COMBINATION SAW
Can do the work of four men using hand tools, in Ripping, Cutting-off, Mitring, Rabbeting, Grooving, Gaining, Dadoing, Edging-up. Jointing Stuff, etc. Full Line of Foot and Hand Power Machinery Sold on Trial. Catalogue Free.
SENECA FALLS MIFG. CO.,
The Manual Company of the Manual Catalogue Free.
SENECA FALLS N. Y.
Mention the American Res. Journal.

Mention the American Bee Journal.

SECUTONS
\$1.50 a M. 3 M, \$4.25.

These ARE NOT Seconds, but perfect Sections. As they are not up to our present high standard, we wish to close them out. Sample free. Widths—7-to 1oot, 1 15-16 in., and 2 in.
Catalog of Bees & Supplies FREE.

I. J. STRINGHAM, NEW YORK, N. Y. 105 Park Place.

MOVED TO LARGER QUARTERS!

In order to take care of the business properly at this Branch, we have moved to 118 Michigan St., [3rd Floor], within two blocks of the Northwestern Passenger station, where we've secured larger quarters, making ample room for a Full Assortment. Send along your orders, remembering that we guarantee satisfaction, and at prices a low as the best quality of Goods can be furnished for. Special Prices on a lot of Stock we are closing out. Send for CATALOG and a List of Goods at Special Prices.

In order to close them out quickly we offer some good Sections, for the next 30 days, or while they last, at these special prices:

White Sections, 4½x4½.

25,000 7-to-ft. at these low prices-1,000 for \$1.75; 2.000 for \$3.00; 5,000 for \$7.00

TRIANGULAR TOP FRAMES.

We also have a stock of Triangular Top Langstroth Frames at these Special prices: 100 for \$1.00; 300, \$2.70; 500, \$4.00; 1000, \$7.00.

On all freight orders of \$5 or less, at this Branch, please add 25c. for cartage. Catalogue Free.

The A. I. ROOT CO., 118 Michigan St., CHICAGO, ILL. Geo. W. York, Mgr. Please mention the American Bee Journal.

HONEY EXTRACTOR PERFECTION Cold-Blast Smokers,

Square Glass Honey Jars, Etc.

For Circulars, apply to Chas. F. MUTH & Son. Cor. Freeman & Central Aves., Cincinnati, O. Send 10c for Practical Hints to Bee-Keepers.

A Bargain—EARLY QUEENS.

119 Colonies Italian Bees in Chaff Hives: two acres land: good house: excellent well

Early Queens-Tested, \$1.50; Untested,

E. L. CARRINGTON, PETTUS, Bee Co., TEX. 75c. 11A4t

General Items.

A Good Colorado Report.

A Good Colorado Report.

I traded a hog for two colonies of bees in February, 1893. I never had any use for bees prior to that time. That summer I received from one hive 96 pounds of comb honey; from the other 6 pounds, and no swarms. The spring of 1894 I had them transferred to new S-frame hives, and they cast 7 swarms. Then I went into those two hives and cut out 9 queen-cells, leaving a queen in each hive. I got 300 pounds of comb honey that season.

Last year the 9 colonies ran up to 28, when I again went "queen-hunting," and got—well, I never stopped to count them, but I had all our glasses, teacups, etc., full of queens, and then some left over. I sold 20 colonies for \$160 to one man, one colony to another for \$7.00, and sold 350 pounds of

20 colonies for \$160 to one man, one colony to another for \$7.00, and sold 350 pounds of honey from the 7 colonies left. As it rained a great deal last summer, it cut our honey crop short. My bees are in fine condition now, and with the assistance of the American Bee Journal I hope to do some good work in the near future in the bee-business.

A. O. Kouns.

Rocky Ford, Colo., Feb. 22.

The Enemies of Bees.

The Enemies of Bees.

Harris, in his work, "The Honey-Bee," says, "Although the Greeks credited the swallow with being a robber of apiaries, we have no reason to charge our swallows with the same crime." No, not our pretty little friend that builds under the eaves; but in many parts of the world there is a far larger species of swallow, known here as the "wind swallow," and probably existing in California, and generally in warm latitudes. The way they go for bees is a caution! Two or three times a day a flock of them comes to my apiary for a meal. They are very daring, and most difficult to shoot, for they dart over the hives with the rapidity of lightning, and the loud and frequent snap! snap! as the poor bees are caught in their beaks, drives the helpless bee-keeper almost to distraction. At much cost of time and powder I have managed lately to bring down three of these audacious rascals, and have found as many as 20 bees in the stowach of one! Nor des cious rascals, and have found as many as 20 bees in the stomach of one! Nor does shooting scare them away; they will swoop backwards and forwards over the hills till they have had their fill.

The swallow—or at least the larger species of this bird—is about the bee-keeper's biggest enemy! Let apiarists in warm latitudes (where all of the swallow tribe least the larger may hitherto have been regarded as harm-less) make a note of this, and when found make a note, if he can, of the swallow, too.

make a note, if he can, of the swallow, too.

I am about to get up a shooting party, of which each member will pay, say a dollar, into the pool, the slayer of the greatest number to take the same. The flock visiting my apiary consume at least 1,000 bees a day, and probably vastly more!

Another enemy of the bee is the Bee! "Bee's cruelty to bee, makes countless thousands kiek." But I am happy to say that since I have adopted the paint cure, robbing in my yard is a thing of the past. I open and expose hives and combs with impunity whether honey be coming in or not; but accompanying me in my rounds is the indispensable paint-pot; as soon as the work is done, and the hive closed, the trush (not two net) is drawn two or three times over the flight board, and just above the flight hole, and no robbers trouble after that—even let them have begun an attack times over the flight board, and just above the flight hole, and no robbers trouble after that—even let them have begun an attack and be crowded about the entrance as thick—well, "as thick as thieves," a dab of the paint-brush at once sends them off about their business, nor do they return. I find this a simple and most efficacious remedy for robbers, and worth many times my annual subscription to the American Bee Journal, in which a year or two ago I happened to see it mentioned.

Another enemy of the bee—in his own

Another enemy of the bee-in his own

BUY "DIRECT FROM FACTORY," BEST MIXED PAINTS

At WHOLESALE PRICES, Delivered FREE For Houses, Barus, Roofs, all colors, and SAVE Beaters profits. In use 54 years. Endorsed by Grange & Farmers' Alliance. Low prices will surprise you. Write for Samples. O. W. INGERSOLL, 289 Plymouth St., Brookiya, N. V.

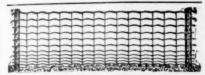
12A13 Mention the American Bee Journal

MURDERED

We have killed high prices. Give me a trial order and be convinced that good Queens can be reared for 50 cts. each. Untested, 50 cts.; Tested, 75 cts. Golden Italians, 3-Banded Italians, and Silver-Gray Carniolans, all the same price. Best of References given.

C. B. BANKSTON,

CHRIESMAN, Burleson Co., TEX. Mention the American Bee Journal



About All The Fun There is

farming nowadays is preparing for the future.
ermanent fences should be built of Page Woven
/ire, and when good times come, be ready to give
our whole attention to business.

PAGE WOVEN WIRE ETHICE CO. Adrian, Mich. G THIS ADVERTISEMENT, MENTE

Better than 10 % Discount!

By comparing the following with the custom-ary prices of Foundation they will be found to be better than a 10 % discount. Prices are f. o. b., cut to any size.

COMB FOUNDATION.

	110	510	10b	25D
Heavy or Medium	45e	42e	40c	38c
Light	45e	44e	42c	40c
Thin		49c	47c	45c
Extra Thin	55e	54c	52e	50c

Samples Free. Watch this advertisement for changes. Better buy how before prices advance. BEESWAX—30c cash, 32c trade, delivered. HIVES. SECTIONS, SMOKERS, ETC., always in stock. PRICES are right. Order before the rush.

11 Att SPRINGFIELD, ILLS.

Merition the American Bee Journa.



Mention the American ties Journal.

If you care to know of its Fruits, Flowers Climate or Resources, send for a Sample Copy of California's Favorite Paper—

The Pacific Rural Press

The leading Horticultural and Agricultural paper of the Pacific Coast. Published weekly, handsomely illustrated, \$2.00 per annum.

PACIFIC RURAL PRESS,

220 Market St. - SAN FRANCISCO, CAL.

TEXAS QUEENS.

If you are in need of Queens, let me have our order. Price-List Free.

8A26t J. D. GIVENS, Lisbon, Tex.

Mention the American Bee Journal.

camp-is that abominable beast-the laying worker. We are taught that once they are established there is hardly any means of getting rid of them. for they will accept neither queen-cells, virgin, nor fertilized queens. Well, I rather think I have found

queens. Well, I rather think I have found out a method of overcoming these senseless objectors to accept a proper Head of the State. All I do is this:

I open the hive, powder them well with a dredger (a tin canister like a biggish peper-box) containing flour scented with a few drops of the essence of peppermint, then dredge a fertile queen and pop her in, and all's well! Dredging with scented flour, whether for the above purpose or for uniting colonies, beats wet spraying all to fits, and the dredger is always ready and handy—no plan to equal it for introducing queens.

I don't know what I should do without the American Bee Journal, though it is hard to say what bee-keepers in this part of the world can do with it, unless it should happily some day contain directions for securing a regularity in the rainfall. Indeed, it is three years since there has been any rainfall worth terming such—there is a sort of a honey-flow on just now, or there would be if the strong winds (which begin regularly at sunrise and stop blowing at sundown) would only cease; and as our white population is not much over half a million, there's not much of a market when we do manage to get a little honey. Bee-keeping is an interesting occupation, and that's about all—in many parts of the globe; though there may be parts where there's money in it. "Oh, where oh where, is that happy land?" Not here, not here, my child!

Mossel Bay, South Africa, Jan. 22. the American Bee Journal, though it is hard

Colorado Bee-Keeping.

Colorado Bee-Keeping.

Stopping a couple of days at this place (Pueblo). I have accidentaily run across a copy of the American Bee Journal containing a letter from Mr. F. L. Thompson, of Arvada, Colo., in which he speaks of his average yield, and further remarks on the yield of some one at Rocky Ford. Colo., as being an average of 150 pounds. I had reason to make inquiry last fall as to where I could get comb honey, and found the average of the best apiarists in that region to be about 60 pounds, while from that it went to nothing. It sounds to me as if Mr. Thompson's informant must have caught a piece of a Kansas cyclone in his mouth.

nothing. It sounds to me as it air. Inompson's informant must have caught a piece of a Kansas cýclone in his mouth.

The average in Mr. Thompson's neighborhood was not even 25 pounds per colony, and much sold as comb was cut out of brood-frames, and I guess Mr. Thompson extracted quite a bit from the same source.

Mr. Thompson ought to know that there were yards near him that yielded almost nothing. One gentleman I heard of, from 400 colonies, between Denver and Littleton, got some 2,000 pounds, and would need to feed 4,000 pounds to winter.

My observation leads me to think that there are many parts of Colorado with all the bee-keepers they need, and that they will in many places crowd each other soon. Prime swarms are often sold in Jefferson county at 50 cents each, put into hives, so you may judge for yourself as to the profits.

Durango, Colo. JOHN SETON.

Durango, Colo.

Section Supers-Mountain Laurel.

On page 715, W. L. asks Dr. Miller for advice in regard to frames with top-bars for holding sections. I have some with hinged bottom-bars, in use the past season, and am very favorably impressed with them. The first cost of making is a little more, but that is more than offset by the convenience and saving in time of scraping and cleaning sections, for they will come off as white and clean as when put on the hive.

I also have had a pattern-slat super in use the past two seasons, and unless further experience changes my mind very materially, I would not discard either, if I could have the old T super given to me.

Some might object to the bars or slats on

Honey-Clovers & Buckwheat SEED FOR SALE.

We have made arrangements so that we can furnish seed of several of the Clovers



Sweet Clover-the Great Honey-Plant.

and Japanese Buckwheat, by freight or express, at the following prices, cash with order:

5 lb	10%	25B	50D
Alsike Clover 8 .80	\$1.35	\$3.50	8 6,25
Sweet Clover 1.10	1.80	4.25	8.00
White Clover 1.50	2.40	6.00	11.00
Alfalfa Clover75	1.20	3.00	5.25
Crimson Clover65	1.00	2,50	4.00
Jap. Buckwheat30	.45	1.00	1.50

Prices subject to market changes.

The above prices include a good, new 25-cent two-bushel bag with each order. Add 25-cents to your order, for cartage, if wanted by freight.

Your orders are solicited.

GEORGE W. YORK & CO.,

CHICAGO, ILLS.



Mention the American Bee Journal

FIRST-CLASS BEE-SUPPLIES

at ROCK-BOTTOM PRICES. Send for Catalog to W. J. STAHMANN, 14A4t WEAVER, MINN. to 14A4t

女女女女女女女女

N

*

Amm of the the the the the the the the





K

K

HAVE LASTED 17 YEARS.

BEST ON EARTH. Always Give Perfect Satisfaction.

Always Give Perfect Satisfaction.

My cool Wire Handle and Bent Nose were patented 1892, are the original, my best invention since my open or direct draft Patent. 1878, that revolutionized Bee-Smokers. My Handle and Nose Patent bent all the other smoker noses. None but Bingham Smokers have all the best improvements. If you buy genuine Hingham Smokers and Honey-Knives you will never regret it. The "Doctor," ¼-inch larger than any other smoker on the market—3½-inch stove, by mail, \$1.50 Conqueror, 3." ... 1.10 Large, 2½-in. "... 1.00 Plain, 2-in. "... 70 Little Wonder, 2-in., wt. 10 oz. ... 68 Bingham & Hetherington Honey-Knives, 80 cents.

Bingham & Hetherington Honey-Knives, 80 cents. T. F. BINGHAM, Farwell, Mich. 7Atf Mention the Bee Journal.

Promptness Is What Counts!

Honey-Jars, Shipping-Cases, and every-thing that bee-keepers use. Root's Goods at Root's Prices, and the best shipping point in the country. Dealer in Honey and Beeswax. Catalogue Free.

162 Mass. Ave. Walter S. Pouder INDIANAPOLIS. IND.

Mention the American Bee Journal

The Patent Wood-Veneer Foundation. Bee-keepers should give it a test, and my All-Wax Foundation. I will guarantee there is no better made. Now is the the time to send wax to be worked up. Send for Samples and Cata-log with low prices. Wax wanted at 30c cash. AUG. WEISS, Hortonville, Wis. 12A13t Please mention the Bee Journal.

Mention the American Bee Journal.

PATENT WIRED COMB FOUNDATION

Has No Sag in Brood-Frames Thin Flat-Bottom Foundation

Has No Fishbone in the Surplus Honey.

the

J. VAN DEUSEN & SONS, Sole Manufacturers, Sprout Brook Montgomery Co., N. Y.

Mention the American Bee Journal

BEGINNERS.

Beginners should have a copy of the Amateur Bee-Keeper, a 70-page book by Prof. J. W. Rouse. Price 25 cents; if sent by mail, 28c. The little book and the Progressive Bee-Keeper (a live, pro-gressive 28-page monthly journal) one year, 65c. Address any first-class dealer, or

LEAHY MFG. CO., Higginsville, Mo. Mention the American Bee Journal.



Mention the American Bee Journal.

account of removing the bees so much farther from the brood, but with a hive full of bees, and plenty of honey in the fields to gather, I do not think they are particular about going ½ or ¾ of an inch farther to store their honey, and without the above conditions I fail to get much work done in the supers.

Mountain Laurel.—I have seen a great deal of late in the bee-papers about mountain laurel and poisonous honey. I don't know that I can say anything that will throw any light upon the subject, but we have plenty of laurel here; the leaves are very poisonous—it answers to the description of the plant given by Novice, on page 146, with the exception of its growing on wet ground. It grows here exclusively on dry ridges, and quite plentifully within 50 or 60 rods of my apiary. When in full bloom it is very beautiful. People come quite a distance to gather the flowers, but I have never heard of any one being injured by eating honey in this vicinity. In fact, I do not remember having ever seen a honeybee working on laurel. I have often wondered if they ever did work on it. Now my attention has been more particularly drawn to it, I will take a little more notice the coming season, and see what I can learn.

But is it possible for a bee to gather and MOUNTAIN LAUREL.-I have seen a great

learn.
But is it possible for a bee to gather and store a poisonous article, without its being injured by it? I think not, and I shall always believe, until more positive proof has been brought forward, that those people were made sick from some other cause than eating honey. I think we can safely trust to the instinct of the bee without fear of being poisoned by eating honey which of being poisoned by eating honey which they have gathered. Animal instinct is very acute in discriminating between the wholesome and unwholesome plants.

wholesome and unwholesome plants.

We have had cattle running among it for several years, and during the past dry seasons. when everything was parched to the earth, and every other bush and shrub was browsed down, the green leaves of the laurel were passed by untouched by them. In a very few extreme cases, when the ground had for a long time been covered with snow, and their desire for something green got the better of their judgment. I have known sheep to be injured by browsing the leaves.

A. D. Watson.

Mansfield, Pa., March 9.

browsing the leaves.
Mansfield, Pa., March 9.

Winter Problem Solved.

I have been experimenting with alfalfa, white and Alsike clover, and buckwheat, on an extensive scale for the last 15 years. I have solved the wintering problem and the pollen-theory humbug to my own satisfaction. I have also succeeded in rearing a queen in December, and had her fertilized. I am sorry to state that my bees, that are on the summer stands, are as full of brood as they ought to be by the middle of April or first of May.

I. C. NIEMOLLER.

Tarnov, Neb., Feb. 28.

From a Maryland Bee-Man.

The more I read every page of the grand old American Bee Journal, the worse beefever I get. I would have it if it cost me fever I get. I would have it if it cost me \$2.50. I talk it up to every one who has a

I had 12 colonies and bought 16 about one month ago, and have them not at home. I am three miles from the mountain, and one mile from the Potomac river, where there are lots of blue thistle.

I noticed in the Bee Journal that farmers could not keep bees and make them a succould not keep bees and make them a suc-cess. No kid-glove farmer can grow wheat or corn, or raise stock if he doesn't give them proper attention, and he will say farming doesn't pay. I can say farming does pay. It pays me about 10 per cent. If you don't attend to bees properly, like stock, they won't pay.

I saw in last week's Bee Journal that a

Chicago bee-keeper has bees in a log that he got on the World's Fair grounds, and he values it very highly because it was cut on



IF YOU WANT THE

BEE-BOOK

That covers the whole Apicultural Field more completely than any other published send \$1.25 to Prof. A. J. Cook, Claremont, Calif.,

Bee-Keeper's Guide,

Liberal Discounts to the Trade.



12A7t Mention the American Bee Journal.

Kansas Bee - Keepers!

-SAVE FREIGHT-

A Car-load of "Higginsville Bee-Supplies" just received. GET MY CATALOGUE.

HENRY L. MILLER, TOPEKA, KAN. 355 Shawnee Ave. Mention the American Bee Journal.

COMB FOUNDATION!

Wax always wanted for Cash or in Exchange for Fdn. or other Supplies. My trade is established on Low Prices and the merit of my Foundation. Orders filled promptly.

WORKING WAX INTO FDN. BY THE LB. A SPECIALTY. Wholesale prices to dealers and large consumers. Send for Prices and Samples to—GUS DITTMER, AUGUSTA, WIS. Reference—Augusta Bank.

Mentiom the American Res. Journal.

Mention the American Bee Journal.



The Quaker Novelty Co. Salem, Ohio.

13A4t Please mention the Bee Journal.

HONEY We have a large amount of Pure No. 1 Alfalfa we will sell cheap. NO. 1 Alfalfa we will sell cheap.

SEED Of those great honey-producing plants and Cleome or Rocky Mountain Honey-Plant. Alfalfa seed at 7 cts. a lb.

BOSS bcc-cscape Warranted the best, simon the market. Sent postpaid to any address for 50 cts. . It can be returned at our expense if it is not as represented, or we will send the Kscape on trial to any bec-keeper wishing to test it in good faith. We are agents for the Kscape on trial to any bec-keeper wishing to test it in good faith. We are agents for the Ferguson Patent Hive super and Wicked Gate Honey-Board, with the Escape. It is the easlest, quickest hive to handle for the production of comb honey. Address,

E. S. LOVESY & CO...

355 6th East St. SALT LAKE CITY, UTAH.

Mention the American Bes Journal.

Mention the American Bee Journal.

The Bee-Keepers' Guide: Or Manual of the Apiary,

By PROF. A. J. COOK.

This 15th and latest edition of Prof. Cook's magnificent book of 460 pages, in neat and substantial cloth binding, we propose to give away to our present subscribers, for the work of getting NEW subscribers for the American Bee Journal.

Bee Journal.

A description of the book here is quite unnecessary—it is simply the most complete scientific and practical bee-book published today. Fully illustrated, and all written in the most fascinating style. The author is also too well-known to the whole bee-world to require any introduction. No bee-keeper is fully equipped, or his library complete, without "The Bee-Keeper's Guide."

For Two New Subscribers and Your Own Renewal.

Send us Two New Subscribers to the Bee Journal and your own renewal (with \$3.00), and we will mail you a copy of Prof. Cook's book free as a premium, and also a copy of the 160-page "Bees and Honey" to each New Subscriber. Prof. Cook's book alone is \$1.25, or we club it with the Bee Journal for a year—both together for only \$1.75. But surely anybody can get only 2 new subscribers to the Bee Journal for a year, and thus get the book as a premium. Let everybody try for it. Will you have one? Will you have one

GEORGE W. YORK & CO.,

CHICAGO, ILLE



Mention the American Bee Journal.

$1896 \stackrel{\mathbf{SAVE}}{\mathbf{MONEY}} 1896$

If you want first-class ITALIAN QUEENS FOR BUSINESS, ITALIAN QUEENS Foundation at Wholesale Prices, Hives, suited for the South, or SUPPLIES, send for Price-List—to

J. P. H. BROWN, AUGUSTA,



INCUBATORS

Our 160 page, finely illustrated Combined Poultry Guide and Catalogue will tell you what you

PROFITS IN POULTRY We manufacture a complete line of Incubators, Brooders and Poultry Appliances. Guide and Catalogue ibc. (stamps or silver) Worth one Dollar. (Reliable Incubator & Brooder Co., Quincy, Ills.)

Please mention this Journal.

Cheap for Cash—ITALIAN BEES

In 10-frame [size 9%x17%] hive, \$4. Italian Queens, \$1.50. Address.

ns, \$1.50. Address.

OTTO KLEINOW,

122 Military Avenue, DETROIT, MICH. Please mention the Bee Journal.



BeeSupplies Largest Stock and Greatest and Greatest Variety in the West. **BEST** Goodsat Low-

EST prices. Cat. of 80 pages FREE. E. KRETCMER, RED OAK, IOWA. Mention the American Bee Journal.

Bees, Queens, Nuclei —We will sell, the Two-Frame Nuclei, with a Choice Warranted Queen, at \$2.50 each. Special prices on large orders furnished.

LEININGER BROS, 6Etf FT. JENNINGS, OHIO.

WHEN ANSWERING THIS ADVERTISEMENT, MERTION THIS JO

historic grounds. I have one that was cut Dec. 5, 1895, on the battle-field of Antietam, with the bees still in it. It had about 40 pounds of honey. I am going to transfer the bees the last of this month, or first of April first of April.

The outlook at present is very good for another big crop of peaches, so next summer it will be "honey and peaches."

Keedysville, Md. L. A. HAMMOND.

A "High-Minded" Testimony.

I hope it will not be out of place right here to mention what a great help the American Bee Journal has been to me—an inexperienced "tenderfoot." I have re-ferred to different articles contained therein many times, any one being worth more than twice the price of subscription. Just to-day I have received information on "a heap" of subjects that will no doubt save me trouble and expense later on.

I am a pretty "high-minded" fellow, hibernating 9,000 feet above sea-level. Fruit-trees stop growing nearly a mile lower down, but wild flowers are abundant way above "timber-line."

"Yes—the bee sings here—I confess it-Sweet as honey—Heaven bless it; Yet she'd be a sweeter singer If she didn't have no stinger."

LESLIE ALEXANDER.

Silver Cliff, Colo.

He's "Agin" the Amalgamation.

The "old reliable" American Bee Journal is always a welcome visitor.

In reference to the amalgamation of the National Bee-Keepers' Union and North American Bee-Keepers' Association, as a American Bee-Keepers' Association, as member of the former I have this to say:

member of the former I have this to say:

I am most emphatically opposed to the uniting of the two organizations, for the following reasons: As it has already been understood, the object of the two organizations are altogether different, the North American Bee-Keepers' Association being more for pleasure, while the National Bee-Keepors' Union is an organization, strictly speaking, for business only, and, in my humble opinion, should so remain, for I think it will be conceded that business and pleasure cannot be successfully carried on together—one or the other is bound to suffer, and that is sure to be the business part of the organization. organization.

organization.

Dr. C. C. Miller cites us (on page 3) to the fact that the German societies combine business with pleasure. I think his citation is not well taken. In the first place, the influences in the United States (or rather in North America) that govern these things are not quite the same as they are across the "big pond," in Germany. Over there, as I understand it, everything of a business nature (at least) is controlled by the govnature (at least) is controlled by the government. If a bee-keeper over there, or any one else, is found adulterating his any one else, is found adulterating his honey, or some human hyena attempts to persecute a bee-keeper or fellow tradesman, or any one else for that matter, he is punished in short order, while over here hell-hounds can do these things (or attempt to, at least) and escape punishment. Consequently, we need just such an organization as the National Bee-Keepers' Union, devoted to nothing else but strictly business.

to nothing else but strictly business.

It strikes me that when we go to giving a premium, or some inducement to join the North American Bee-Keepers' Union (as some have proposed since this discussion started), we fail to fully appreciate the object for which the National Bee-Keepers' Union was inaugurated, and puts the organization on a par with some little children's affair, where it is necessary to make some kind of a present in order to induce the children to join, and stay joined. The way I see these things is this:

If the National Bee-Keepers' Union isn't worth belonging to strictly for business, and for the protection each and every mem-ber is entitled to, and is bound to receive, without any other attachments of any

WOVEN WIRE FENCE



48Etf Mention the American Bee Journal

DO NOT ORDER UNTIL YOU HAVE WRITTEN US FOR PRICES ON

The "Boss" One-Piece Section



Also D. T. Hives, Shipping-Crates and Other Supplies.

We have completed a large addition to our Factory, which doubles our floor room; we are therefore in better shape than ever to fill orders on short notice. Send for Price-List

J. FORNCROOK,

WATERTOWN, Jeff. Co., WIS., Jan. 1st, 1896. Mention the American Bee Journal.

Barnes' Foot-Power Machinery.



Read what J. I. PARENT. O
CHARLTON, N.Y., says—"We
cut with one of your Combined Machines, last winter
50 chaff hives with 7-in. cap.
100 honey-racks, 500 broad
frames, 2,000 honey-boxes
and a great deal of other
work. This winter we have
double the amount of beehives, etc., to make and we
expect to do it with this Saw.
It will do all you say it will.
Catalogue and Price - List
Address, W. F. & JOHN BARNES,
No. 995 Ruby St., Rockford, Ill.

Mention the American Bee Journal.

RURAL CALIFORNIAN

Tells all about Bees in California.

Tells all about Bees in California.

The Yields and Price of Honey; the Pasturage and Nectar - Producing Plants; the Bee-Ranches and how they are conducted. In fact the entire field is fully covered by and expert bee-man. Besides this, the paper also tells you all about California Agriculture and Horticulture. \$1.50 per Year; Six Months, 75 cents. Sample Free.

THE RURAL CALIFORNIAN, 218 N. Main St., Los Angeles, Calif.

Mention the American Bee Journal

\$3.00 Worth for \$2.00!

Until further notice, we propose to give you a chance to get some good reading-matter for the long winter evenings, at half price.

Send us \$2.00, and we will mail you your choice of \$2.00 worth of the following book-lets, and also credit your subscription to the American Bee Journal for one year:

	Poultry for Market and Profit	250
	Our Poultry Doctor	30c
	Turkeys for Market and Profit	250
	Capons and Caponizing	
	Pured fife	30c
	Rural Life	25c
	Preparation of Honey for the Market	10c
	Bee-Pasturage a Necessity	10c
	Hive I Use, by Doolittle	5e
	Foul Brood, by Dr. Howard	250
	Foul Brood, by Kohnke	25c
	Foul Brood, by Cheshire	100
	Bee-Keeping for Profit, by Dr. Tinker	250
	Kendall's Horse-Book-Eng. or German	250
	Silo and Silage, by Prof. Cook	250
	Hand Book of Health by D. France	230
	Hand-Book of Health, by Dr. Foote	250
	Maple Sugar and the Sugar Bush	
	Potato Culture, by Terry	400
	Carp Culture, by Root & Finney	400
	Strawberry Culture, by Terry & Root	400
	Bienen Kultur, by Newman [German]	400
	Winter Problem in Bee-Keeping [Pierce].	500
	Bee-Keepers' Directory, by Henry Alley.	500
ĺ	Advanced Bee-Culture. by Hutchinson	500
l	5 Honey as Food and Medicine	000
l	o noney as rood and Medicine	250

GEORGE W. YORK & CO., CHICAGO, ILLS.

That Queen-Clipping Device Free!

PLEASE READ THE FOLLOWING OFFER:

We have arranged with the inventor of the new Queen-Clipping Device (Mr. Monette), to offer it to our present subscribers as a Premium for getting NEW subscribers

Send us just one new name for the American Bee Journal a year (with \$1.00), and we will mail you the Queen-Clipping Device FREE; and will also send a copy of Newman's 160-page book—"Bees and Honey"—to the new subscriber. Or, the Queen-Clipping Device will be sent postpaid for 50 cts. But why not get it as a Premium by the above offer? You can't earn 50 cts. any easier. Almost every bee-keeper will want this Device. See page 130 (Feb. 27) for full description of it. Complete directions accompany each one sent out. It is a most ingenious and useful article. Address,

GEORGE W. YORK & CO., 118 Michigan St., Chicago, Ill.

No. 1 44x44 Snow-White Sections \$2.00 per 1,000. PATENTED,

For the purpose of introducing our One-Piece Section to the bee-keepers generally, we have concluded to make the price \$2.00 per 1,000 for the month of April. Now is the time to get your Sections cheap. We have a choice lot of Section Lumber, gotten out of young timber, and we can furnish you the nicest Section to be had. Write for Sample Section Free.

THE MARSHFIELD MFG. CO.,
MARSHFIELD, Wood Co., WIS.

Mention the American Bee Journal

March 23rd, 1896.

kind whatsoever, then it is not worth be-

kind whatsoever, then it is not worth belonging to.

Now, the National Bee-Keepers' Union has been, and is yet, a grand success, and if something else is not hitched onto it, why, it is bound to continue a grand success. Again, if the North American Bee-Keepers' Association has been such a successful and delightful organization (Dr. C. C. Miller, page 3), why do the members of it want to join an organization which is devoted strictly to the dry routine of business?

If I were a member of the North Ameri-

If I were a member of the North American Bee-Keepers' Association, and was tired of it (no matter from what cause), the

tired of it (no matter from what cause), the easiest way for me to get out of the matter would be to simply drop out, and then join anything else I chose to.

Again, I can't see where the members of the North American, who live outside the United States, are going to derive any benefit from membership in the National Bee-Keepers' Union. If they will, I should be glad to have some one tell me through the columns of the American Bee Journal just how it is going to be done.

These, Mr. Editor, are a few basty thoughts I have attempted to place before

These, Mr. Editor, are a few hasty thoughts I have attempted to place before the readers of the American Bee Journal.

Denver, Colo. Wm. L. Backensto. Denver, Colo.

Gathering Honey and Pollen.

Bees have been gathering some honey and pollen since Feb. 4.
Sigel Brantigam.

Cliff, New Mex., March 9.

Changeable Weather.

We are having winter to-day, the snow being 6 inches deep, and still snowing. On March 10 the bees were carrying pollen nicely; to-day they are covered with snow. Sutton, Tenn., March 12. WM. WEBB.

Poor Prospect for a Crop.

The prospect for a honey crop is somewhere else this year. It won't be as bad as 1894, put the bees will have to rustle in this neighborhood to gather enough for them-selves. AMATEUR.

Miramar, Calif., March 16.

Likes His Own Hive Best.

After trying various kinds and shapes, I now use a bive of my own make, and find I succeed best with it. It has 9 frames, 12% inches wide by 13%, inside measurement; 12 inches deep, with the Hoffman frame. In cold weather the bees cluster in the center of the hive, as all bee-men know, and when more honey is wanted by the cluster, they move upwards, and do not spread out side-

wise; so the hive is deeper, and the bees fill it fuller, and take the honey in the entire hive as they progress upward. I used to use the Langstroth hive, which is a good hive, only in my judgment it is too long and shallow; the bees will cluster in the center and starve after eating honey from the center, and have plenty of honey in each end; that is, where they are wintered on the summer stands. I winter mine on the summer stands, in my hives, and have never lost a colony from starvation, or the summer stands, in my hives, and have never lost a colony from starvation, or from any other cause, in this hive. I have strong colonies, and moth-proof. Here in "drouthy Kansas" my bees yielded me, last season, \$10 per colony, aside from the increase. My hives supports a super holding 21 4½ x4½ sections. I tier up two and three supers high.

hree supers nign.

Now you have my experience of several rears in the bee-business, and to my notion have the best hive except one, and that is he Hubbard hive.

E. A. WILSON.

the Hubbard hive. E Eatonville, Kans., Feb. 22.

Always Something to Learn.

I have taken the American Bee Journal I I have taken the American Bee Journal I think for over 25 years, and always found it interesting and beneficial to one interested in bee-keeping. I am of the opinion that one never gets too old to learn, or gets perfect in any great science. I often tell those who come to me for information in bee-work, that they will find that the more they learn the less they will know. That is the more they learn the progreties the more they learn the proof they have the more them. is, the more they learn the more they will find to learn.

The bee-business in this part of Iowa (the central part) for the past three or four years has been very poor, owing to our exyears has been very poor, owing to our extreme dry weather, especially that of 1894. I lost the majority of my apiary by the great Iowa drouth of 1894. Still, I am not discouraged, and hope to make a good showing for 1896, as our white clover has again got a good start. Of course, the coming summer will again decide the question. Our bees, I think, owing to the good fall bloom, went into winter in good condition. A part will require some feeding early in the spring. So I say to all beekeepers, look out for this part of your duty.

J. W. Sanders.

LeGrand, Iowa, Feb. 22.

LeGrand, Iowa, Feb. 22.

Heavy Winter Losses, Etc.

The loss of bees has been very heavy here this winter and spring, so far, on account of their poor condition. Last fall was the worst on bees of any since I have been keeping bees. Some of my neighbors have lost from 50 to 75 per cent. I have lost 9 colonies out of 63, but if I had not fed I would have lost like the rest, so it pays to take care of the bees take care of the bees

Bees are working on the maple-bloom to

Honey & Beeswax Market Quotations.

CHICAGO, ILL... Mar. 20.—White clover and basswood comb is sought after in preference to any other, and commands a better price and now sells at 15c. for clover and 13\(\alpha\)14c, for basswood. Other white comb honey sells at 11\(\alpha\)12c.; dark, 8\(\alpha\)9c. amber. 9\(\alpha\)10c., and very slow of sale. Extracted is unusually dull, with large amounts on sale. White clover and linden, 6\(\alpha\)7c.; dark and amber grades, 4\(\frac{4}{5}\)6\(\alpha\)5c.

Beeswax, 28\(\alpha\)30c.

R. A. B. & C0.

KANSAS CITY, Mo., Mar. 18.—The demand for comb and extracted is fair. We quote: No. 1 white, 1-lbs., 13@14c.; No. 2, 10@11c.; No. 1 amber, 11@12c.; No. 2, 8@10c. Extracted, white, 5½@6c.; amber, 5@5½c. Beeswax, 20@22c. C. C. C. & Co.

CINCINNATI, O., Mar. 19.—Demand is fair for best white comb honey, at 12@14c. in a jobbing way. Extracted is fair at 4@7c. Supplies of both are fair.

Beeswax is in good demand at 25@30c. for good to choice yellow. Arrivals are not adequate to the demand.

C. F. M. & S.

PHILADELPHIA. PA., Mar, 6,—Honey has been selling freely, there being considerable call for como honey, and the war in Cuba has made extracted honey sell to the baking trade who previously used Cuba honey. We quote: Fancy comb. 15c.; fair to good, 11@13.; fair, 9c. Extracted. 4½@5½c.; pure white clover. 10c. Beeswax, 30c. W. A. S.

NEW YORK, N. Y., Mar. 23.—There is a fair demand for white comb honey, and the market is well cleaned up. We have another car now in transit from California. We quote same: 12@14c. Plenty of buckwheat comb is on the market, and same is moving of slowly at 8c. Extracted, all grades, dull, at unchanged prices.

Beeswax firm at 30@31c. H. B. & 8.

List of Honey and Beeswax Dealers.

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

HILDRETH BROS. & SEGELKEN. 120 & 122 West Broadway. Chas. Israel & Bros., 486 Canal St.

Kansas City, Mo.

C. C. CLEMOMS & Co., 423 Walnut St.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Philadelphia, Pa.

WM. A. SELSER, 10 Vine St.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central ave.

Convention Notices.

UTAH.—The Utah Bee-Keepers' Association will hold their semi-annual meeting in Room 54, City and County Building, Salt Lake City. Apr. 6, 1896, at 10 a.m. All are invited. "In union is strength. By industry we thrive." Come, and bring your friends, and enjoy a good time. A full program in the interest of the industry will be presented. The Association needs your ald; then let every one do his full duty for our own interest and self-preservation.

Provo, Utah.

WANTED to Exchange—St., Bernard Pups, fine ones, for something useful. Address with stamp—SCOTT BRILLHART, Millwood, Knox Co., Ohlo.

J. W. TAYLOR

Italian Queens for Sale

Untested, ready now, 75c. apiece: 6 for \$4.25, or 12 for \$8.00. Tested. \$1.25. Select Tested. best, \$2.00. Pay for Queens on arrival. I guarantee safe arrival and satisfaction. 14A9t OZAN, ARK.

day, the first for this season, and if the weather continues nice for awhile, so we can get them in good condition early, we may be able to get a good crop of honey. The last four seasons have been very poor, and we would like a change very much. I have had a bad case of bee-fever for several years, and if we should have a real good season like we used to have, years ago, I suppose I would get clear beside myself. I have been occupied in several positions, but have never found anything so fascinating as the bee-business.

but have never found anything as the bee-business.

I admire the get up of the Bee Journal very much, and I get more pleasure from its pages than any book or paper I take.

May its shadow never grow less.

W. S. FEEBACK.

Carlisle, Ky., March 12.

The North American at Toronto.

It afforded me much pleasure to meet so may bee-keepers at the North American, in Toronto, many of whom I had read about, but when we meet face to face it seems so much nicer. It seemed almost providential that we had with us dear old Father Langthylored whom I had heard so much but that we had with us dear old Father Lang-stroth, of whom I had heard so much, but when I saw him, and heard the gracious words that fell from his lips, it was then that I began to realize in the old veteran, the Grand Old Man.

At the convention there were essays read and commented mon, but one I have in

At the convention there were essays read and commented upon, but one I have in mind deserves credit, and that was that "Convention Song," the words written by the Hon. Eugene Secor, and set to such nice music by Dr. C. C. Miller. I don't wonder that the Doctor is so charming when he has such good music in him. I don't need to say much about Mr. Secor, for my mother was a Secor, and they are great folks.

or le

ups

lo

great folks.

That Convention Song I presume would not have been sung had it not been for Messrs. Newman, York, Calvert, and Miss Root, and it was appreciated by all, especially by the Hon. John Dryden, Minister of Agriculture, Dr. Mills, and many others. I think it would be nice to have it sung and put into practice, for surely we are brothers; and let us not know any dividing lines. The nearer we get to the sentiment of that song, the better we will be prepared for that Heaven where I trust we all shall meet.

we all shall meet.

WALLACE SECOR WALTON.
Scarboro Junction, Canada.

Poor Honey Year.

The last was a poor honey year in this section; 5 colonies that wintered gave me only 75 pounds of section honey and 2 swarms. The same Italian queen swarming twice—once in June, and again the last of August last of August.

last of August.

Iam wintering 10 colonies—8 out-of-doors, 4 packed in chaff, and 4 in fine marsh hay—and 2 in the house cellar. On Feb. 27 they were all alive, and had a good flight, the first since early in December.

I grow fruit for a living, and keep a few bees to fertilize the bloom, and I am satisfied it pays, even if I get no surplus honey.

W. C. Nutt, on page 158, expresses my views exactly, only I prefer to locate east of the Mississippi river. On account of poor health, I am obliged to seek a warmer winter climate. Like Mr. Nutt, I would like to correspond with some one in western North Carolina or Virginia, northern Georgia or Alabama. If he finds more localities than he can occupy, perhaps he will generously divide with me.

Paw Paw Mich Morel.

A. H. SMITH. Paw Paw, Mich., March 5.

Bee-Keeping in Florida.

Bees in this locality find something to gather from the ti-ties nearly every day during the winter. Flowers bloom, being protected by the heavy growth of evergreen shrubs, and bees carry in heavy loads of pollen.

I should judge from observation, and from what I've learned from others, that

colonies will be stronger in the spring, that have had the sun shining upon their hives. They are rearing young, and need warmth. The scuppernong grape has been called the good-sense grape, for it never leaves out until all danger from frost is passed, and sheds its leaves in the fall. It would be a good shade for bees, for it would protect them the only time they need it—during the summer's heat. And another item in its favor is, that it does not thrive spread on the side of a trellis, but runs up, and spreads out in every direction over a level surface, forming a dense shade. The catalogues which say that this grape should not be trimmed, make a mistake. Where it is allowed to grow thickly, the flowers smother, and little fruit is produced. Again, the tendrils wind so tightly around a branch that the sap cannot circulate, and it will perish. This trimming should be done when the leaves fall, or sooner, for if it is trimmed when the sap is rising, it will bleed to death; if it does not die, it will weaken it so much that it will fail to bear that season. One vine will cover a quarter of an acre or more. From the dangling roots, which I've seen hanging from vines, I imagine that it is of the nature of a banyan.

Bees are pressed with work now, for ti-ti

yan.

Bees are pressed with work now, for ti-ti and other wild shrubs and trees are blooming, and so are fruit-trees. Pear and plum trees are white with bloom, while a breeze brings down a shower of white petals from the peach. The early varieties of peaches—such as "honey" and "angel"—have fruit larger than hazel-nuts; the peen-toes are cheed like a small list toward.

are shaped like a small, flat tomato.

MRS. L. HARRISON.

St. Andrews Bay, Fla., March 16.

Elements of Botany, by J. Y. Bergen, A. M.; Ginn & Co., Boston. Price, postpaid, \$1.20.

Elements of Botany, by J. Y. Bergen. A. M.; Ginn & Co., Boston. Price, postpaid, \$1.20.

Every bee-keeper, and I might say every farmer, can. and should, know at least the elements of botany. I do not know of a better place to learn them than in this new work just from the press. The subject is handled here in such a fresh, vigorous, simple, and at the same time scholarly, way, that I cannot see how anyone, young or old, could take up the book and give it a few minutes' attention without becoming greatly interested in the subject-matter. Prof. Bergen is an experienced teacher, and has learned that there is an interesting and attractive way to state what has sometimes been called "dry facts,"—dry, I apprehend, many times on account of the way they are presented.

We have here just enough of the laboratory method combined with an outline of vegetable anatomy and physiolo"y, and a brief statement of the principles of botanical classification to give the student a clear idea of the foundation principles of botanical classification to give the student a clear idea of the foundation principles of botanical classification to give the student a clear idea of the foundation principles of botanical classification to give the learner, render the work unfit for common school use, or as a popular hand-book.

The bee-keeper will be interested in the recognition his industry indirectly receives when, in speaking of bees, Prof. B. says: "They accomplish an immense share of the work of fertilization by means of the pollengrains which stick to their hairy coat." I. for one, feel like encouraging all such recognition, and bidding the students of the land, who are thus helping forward our industry to a more general recognition, a Godspeed. He, also, very properly makes a distinction between honey and nectar—a discrimination which is frequently overlooked, not only by botanists, but by writers on aplculture as well.

EMERSON T. ABBOTT.

Golden QUEENS BEES

- - FOR SALE- -

1 Frame Nucleus, with Queen...... \$1.50 $\frac{2.00}{2.50}$

QUEENS—40 cts. each; ½ doz., \$2.25; 1 doz. \$4
Safe arrival guaranteed.
No foul brood or bee-paralysis. Reference—
Express Agt., P. M., Kline & Burt, merchants.
Money Order office P. O., Guunison, Miss.
One-cent stamps taken under \$1.00. J. H. SIPLE.

Mention the American Bee Journal.

PERSONAL MENTION.

MR. THOMAS G. NEWMAN and family expect to leave Chicago for California, April 16, arriving in San Diego the evening of the 23rd. We'll all—

Hope they'll like the "Sunset State," With its heaps of honey and "Golden Gate."

MR. E. WHITCOMB, of Friend, Nebr., believes that sweet clover and alfalfa promise great things for bee-keepers in the future in the State of Nebraska. He thinks the past drouths may prove "a blessing in disguise." A dry sort of blessing, probably.

Mr. J. C. Hicks, of Kentucky, writes: "I like the American Bee Journal very much. It is worth all it costs,"

MRS. I. HARRISON is again at her old home, 821 Hurlburt St., Peoria, Ill., after several months spent in Florida. She says the movable-frame hive is slowly marching through that State; and that in her opinion there is no honey there equal to the white clover honey of the North. We thought the orange-blossom honey was about as fine, but you know tastes differ.

Mr. E. Kretchmer, of Red Oak, Iowa, was shown in Gleanings for March 15 by an excellent portrait. Takes a good "picter."

MR. WM. STOLLEY, of Grand Island, Neb., said at their last State convenion that he had 200 tons of sweet clover hay. He prefers it to any other kind, if rightly treated. His stock like it best, too. He says his are "educated cattle." Wish he'd tell just how to treat sweet clover for hay.

Mr. Daniel Danielson, of Clarkson, S. D., doesn't think it will pay to sow rape for honey alone, though the bees work on it lively.—Gleanings.

REV. E. T. ABBOTT some time since lectured before a meeting of the Kansas State Board of Agriculture, and Mr. Co-burn, the Secretary, wrote Mr. Abbott as follows afterward:

"I wish personally to thank you for your excellent address at our meeting, which was apparently listened to with profit and pleasure by the large audience of bright Kansans, who heard it."

Mr. Coburn also sent a copy of a resolution adopted unanimously by the Board, expressing its hearty thanks to all who contributed by their excellent essays, addresses, etc. Those Kansas folks are quite appreciative. They seem to "know a good thing when they see it," or hear it.

Mr. Geo. McCullough, of Iowa, says: "The American Bee Journal is very excellent help in the bee-business, and well worth preserving for reference."

HON. R. L. TAYLOB—Superintendent of the Michigan Experiment Aplary—thinks some bee-editors are somewhat careless in their criticisms of his experiments, partic-ularly Gleanings' criticism of his honey-heating experiment, where it seemed to Editor Root that the result of the experi-Editor Root that the result of the experiment would have been more valuable had Mr. Taylor used extracted honey, instead of comb honey broken up, as the former would have been free from any beeswax. Mr. Root thought the wax being heated with the honey was apt to affect the flavor of the honey as much, or more, than the heating. That looked reasonable to us. We believe Mr. Taylor expects to experiment again, using the extracted honey, free from all comb.

GOOD GOODS KEEP IT.

If you want the best supplies that can be made at a little less cost than you can buy the same goods for elsewhere, write to us for low prices. 1896 Catalogue now ready -ask for it and a free copy of The American Bee-Keeper (36 pages).

Address

THE W. T. FALCONER MFG. CO., JAMESTOWN, N. Y.

Mention the American Bee Journal.

ROOTS Prices Reduced on Dovetall Hives and Sections. A full line of Aplarian Supplies in stock to fill orders promptly at lowest prices for Best Goods. 36-page Catalogue Free.

JNO. NEBEL & SON, High Hill, Mo.

Mention the American Bee Journal 4A26t



To SAY to the readers BEE JOURNAL that DOOLITTLE

has concluded to sell-BEES and QUEENSin their season, during 1896, at the following prices:

prices:
One Colony of Italians
on 9 Gallup frames, in
light shipping-box \$60
Five Colonies.... 25 00
Ten Colonies.... 45 00
1 untested queen. 1 00
6 " queens 5 50
12 " " 10 00

12 " 10 00 1 tested Queen... \$150 3 " Queens 3 50 1 select tested queen 2 00 5 " Queens 4 00

Select tested queen, previous season's rearing . 400
Extra Selected for breeding, THE VERY BEST. 500
About a Pound of BEES in a Two-frame Nucleus, with any Queen, \$2.00 extra.

Circular free, giving full particulars regarding the Bees and each class of Queens.

6. M. DOOLITTLE,

12 A 25t

BORODINO, Onon. Co., N. Y.

OUEENS

Smökers, Sections, Comb Foundation, And all Apiairan Supplies cheap, Send for E. T. FLANAGAN, Belleville, III. 6A26t Please mention the Bee Journal.

TAKE NOTICE!

BEFORE placing your orders for SUP-PLIES, write for prices on 1-Piece Basswood Sections, Bee-Hives, Shipping - Crates, Frames, Foundation, Smokers, etc.

PAGE & LYON MFG. CO.

NEW LONDON, WIS.

WHEN ANSWERING THIS ADVERTISEMENT, MENTION THIS JOURNAL

ARLOADS



Of Bee-Hives, Sections, Shipping-Cases. Comb Foundation, and Everything used in the Bee-Industry.

I want the name and address of every Bee Keeper in America. No reason why you cannot do business with me. I have Cheap Lumber and Experienced Workmen; a good Water-Power Factory and hnow how to run it. I am supplying Dealers as well as consumers. Why not you? Send for Catalogues, Quotations, etc. W. H. PUTNAM, IK.

RIVER FALLS, Pierce Co., WIS.

Mention the American Bee Journal.

Bottom Prices 28c Cash Paid for Beeswax

For all the good, pure yellow BEESWAX delivered to our office till further notice, we will pay 28 cents per pound, cash; or 32 cents for whatever part is exchanged for the Bee Journal, Honey, Books or Seed, that we offer. If you want cash promptly for wax, send it on at once. Dark or impure wax not taken at any price. Address plainly,

George W. York & Co., 118 Michigan St., Chicago, III.

BIN-PIVES,

We make a Specialty of these Goods, and defy Competition in

QUALITY, WORKMANSHIP AND PRICES.

Write for Free Illustrated Catalogue and Price-List.

G. B. LEWIS COMPANY, Watertown, Wis.

Be sure to mention the American Bee Journal when you write.

19th Year

Is still in the lead, for we use all the latest improvements, including the NEW PROCESS. and still make the best goods. Remember that we do not use any acid to purify our beeswax, and that is why our Foundation preserves the smell of the honey and is more acceptable to the bees, than any other. It is kept for sale by

- T. H. Strickler, Solomon City, Kansas. G. K. Hubbard, Fort Wavne, Ind. L. Hanssen, Davenport, Iowa. C. Theilmann, Theilmanton, Minn, E. C. Eaglesfield, Berlin, Wis. E. T. Abbott, St. Joseph, Mc. J. M. Jenkins, Wetumpka, Alabamā John Rey, East Saginaw, Mich. Vickery Bros., Evansville, Ind.
- The Jennie Atchley Company, Beeville, Texas. C. F. Muth & Son, Cincinnati, Ohio E. Kretchmer, Red Oak, Iowa.
 Jos. Nysewander, Des Moines, Iowa.
 G. B. Lewis Co., Watertown, Wis,
 James Reynolds Elevator Co., Poughkeepsie, N.Y.
 Louisiana Bee-Keepers' Supply Manufactory,
 Donaldsonville, La.
 Page & Lyon, New London, Wis.

and many other Dealers. All agree in saying that no goods are better than ours.

Those of our customers who formerly bought through Thos. G. Newman can get our Foundation in Chicago, Ill., by addressing us at 118 Michigan Street. We keep no other goods there.

We make a specialty of Veils and Veil Stuffs of best quality, cotton and silk.

Langstroth on the Honey-Bee, Revised.

Bee-Keepers' Supplies, Smokers, Sections, Tin Pails, etc.

Samples of Foundation and Tulle FREE with Circular. Instructions to beginners with Circular. BEESWAX WANTED. Send us your address.

CHAS. DADANT & SON,

Mention the American Bee Journal.

HAMILTON, Hancock Co., ILL.

All the leading varieties of choice plants and trees. Koonce Pear (frost proof) and other valuable sorts at popular prices Send for descriptive Catalogue FREE. PLEASANT VALLEY NURSERIES -- ARTHUR J. COLLINS, Moorestown,

BEAUTIFUL Transparent TOUGH

and yet PLIABLE.

REDUCED PRICES

DELIGHTS ALL

RECENT COMPARATIVE TESTS IN FLORIDA

show that the old-process dipped wax will sag or stretch in the hive nearly five times as much as that by the new Weed process.

Our New Sanded and Polished Sections

and Bee-Hive Material are the Finest Product

that money and machinery can turn out. CATALOG FREE.

THE A. I. ROOT CO., MEDINA, OHIO.

Syracuse, N. Y. 118 Michigan St., Chicago, Ill. 1024 Mississippi St., St. Paul, Minn.